

Curriculum Vitae Sasha Ondobaka

Professional and Education history

Senior research associate at the Wellcome Trust centre for Neuroimaging and Sobell department of Motor Neuroscience and Movement Disorders, Institute of Neurology

University: University College London
Collaborators: Prof. Karl Friston and Dr. James Kilner
Discipline: Cognitive and computational Neuroscience
City and country: London, United Kingdom
Start date: December 2014

Post doctoral researcher at the Donders Institute for Brain, Cognition and Behaviour

University: Radboud University Nijmegen
Supervision: Prof. Harold Bekkering
Discipline: Cognitive Neuroscience
City and country: Nijmegen, The Netherlands
Start date: June 2013

PhD student at the Donders Institute for Brain, Cognition and Behaviour

University: Radboud University Nijmegen
Supervision: Prof. Harold Bekkering & Dr. Floris de Lange
Discipline: Cognitive Neuroscience
City and country: Nijmegen, The Netherlands
Start date: October 2008
Title Project: "Conceptual and perceptuo-motor processes in control and inference of goal-directed behavior"

Research Master's degree in Cognitive Neuroscience

University: Radboud University Nijmegen
Faculty/discipline: Research Master Cognitive Neuroscience
City and country: Nijmegen, The Netherlands
Date: august 2008
Title Master's thesis (*cum laude*): "Virtual lesions of the inferior frontal gyrus during perception-action coupling"

Research trainee (fulltime) at Donders Institute for Brain, Cognition and Behaviour, Nijmegen

Period: September 2007 - August 2008

Project: The brain basis of imitative and complementary actions.

Supervisors: Dr. Roger Newman Norlund & Prof. dr. H. Bekkering

Description: I used a multidisciplinary approach (i.e. fMRI and TMS) to investigate the brain basis of imitative and complementary actions in humans. I was involved in all the facets of experimental research, including experiment setup and preparation, data acquisition, data analysis, preparing the manuscript for publishing etc.

Bachelor's degree in Psychology

University: University of Tilburg
Faculty/discipline: Cognitive Neuroscience (major), Child Psychology (minor)
City and country: Tilburg, The Netherlands
Date: august 2006
Title Bachelor thesis (*cum laude*): "Effects of Methylphenidate on Response Inhibition in Children with ADHD"

Research assistant (part-time) at Research Department of Medical Psychology and Psychotherapy at Erasmus University Medical Centre, Rotterdam

Period: April 2006 – June 2007
Project: 'Chronic pain in young children' Behavioural and Cognitive Development (Generation R)
Supervisors: Drs. Noortje Wolff & Prof. dr. Jan Passchier
Description: As a voluntary research assistant I was involved in data acquisition for a study on chronicle pain development in baby's. Here, I also attended the weekly research meetings, where I learned about carrying out and presenting an empirical study.

Publications (manuscripts)

Ondobaka, S., Hald, L. & Bekkering, H. (in press). Predictive embodied cognition. In J. Coello & M. Fisher (Eds.), *Foundations of Embodied Cognition*.

Ondobaka, S., de Lange F. P., Wittmann, M., Frith, C. D. & Bekkering, H. (2014). Interplay between conceptual expectations and movement predictions underlies action understanding. *Cerebral Cortex*

Ondobaka, S., de Lange F. P., Newman-Norlund, R. & Bekkering, H. (2013). Action recognition depends on observer's level of action control and social personality traits. *PloSONE*

Ondobaka, S., & Bekkering (2013). Conceptual and perceptual action control and action recognition. *Cortex*

Ondobaka, S. & Bekkering, H. (2012). Hierarchy of idea-guided action and perception-guided movement. *Frontiers in Psychology*

Ondobaka, S., de Lange F. P., Wiemers M., Newman-Norlund, R. & Bekkering, H. (2012). Interplay between action and movement intentions during social interaction. *Psychological Science*

Newman-Norlund, R., Ondobaka, S., van Schie, H.T., van Elswijk, G. & Bekkering, H. (2010). Virtual lesions of the IFG abolish response facilitation for biological and non-biological cues. *Frontiers in Behavioral Neuroscience*

Ondobaka, S., Wittmann, M., de Lange F. P. & Bekkering, H. (submitted). Interregional connectivity minimizes surprise responses during action perception.

Ondobaka, S. & Monroy, C. (submitted). The role of prediction in infant and adult action perception.

Ondobaka, S., Kilner, J. & Friston, K. (submitted). The role of interoception in Theory of Mind.

Ondobaka, S., Brown, E.C. & Bekkering, H. (in prep). Influence of own and others' rewards on action prediction related beta oscillatory activity.

Publications (selected conferences and talks)

Invited Presenter at the EuroAsianPacific Joint Conference on Cognitive Science, Torino

Period: September 2015

Organization: Cognitive Science Society and International Association for Cognitive Science

Invited Presenter at the Massachusetts Institute of Technology (MIT)

Period: April 2014

Organization: Dr. Rebecca Saxe

Invited Presenter at the University College London, Wellcome Trust Centre for Neuroimaging

Period: December 2013

Organization: Prof. K. Friston

Description: Here, I was invited to give a talk on "Conceptual expectations and movement predictions in action control and action perception".

Presenter at the Annual Meeting of Cognitive Neuroscience Society, San Francisco

Period: April 2013

Organization: CNS

Description: Here, I presented my work from the fMRI project entitled "*Fronto-insular cortex implements Bayesian inference for action understanding*".

Presenter at the Annual Meeting of the Organization for Human Brain Mapping (HBM), Beijing

Period: June 2012

Organization: HBM

Description: Here, I presented my work from the fMRI project on the "Hierarchy of predictions underpins neural processing of goal-directed behavior".

Presenter at the meeting of the European Society for Cognitive Psychology (ESCOP), San Sebastian

Period: September 2011

Organization: ESCOP

Description: Here, I gave a talk about the project "Interplay between action and movement intentions during social interaction".

Invited Presenter at the workshop "New Perspectives on Joint Action and Task Sharing", Leipzig

Period: September 2010

Organization: P. Baess, T. Dolk, C. Jaeger & W. Prinz

Description: Here, I was invited to give a talk on "How others' movement and action intentions influence our own". The aim of the workshop was to bring together researchers that work in the field of Joint action and Task sharing in order to exchange views and experiences.

Invited Presenter at the University of Minho, Department of Industrial Electronics, Guimaraes

Period: October 2010

Organization: Prof. E. Bicho & Prof. W. Erlhagen

Description: Here, I was invited to give a talk on "How others' movement and action intentions influence our own".

Presenter at the Federation for European Neurosciences (FENS) Forum, Amsterdam

Period: July 2010

Organization: FENS

Description: Here, I presented a poster on the project "Virtual lesions of the IFG abolish response facilitation for biological and non-biological cues".

Presenter at the symposium: Motivational and Cognitive Control, Oxford

Period: June 2010

Organization: R. Mars, J. Sallet, N. Yeung & M. Rushworth

Description: Here, I presented a poster on the project "Interplay between action and movement intentions during social interaction".

Presenter at the Joint Action Meeting, Amsterdam

Period: July 2009

Organization: Natalie Sebanz & Guenter Knoblich

Description: Here, I presented a poster on the project "Intention dependent modulation of perception-action coupling in social interactive setting". The aim of this bi-annual Joint Action meeting (JAM) was to bring together cognitive scientists and researchers from related disciplines who share interest in individuals' ability to act together.

Presenter at the 5th NWO Cognition Autumn School, Doorwert

Period: October 2008

Organization: Bernhard Hommel, Chris Dijkerman

Description: Here, I presented a poster on the project "Intentional congruency modulates perception-action coupling". This Autumn school on Perception and language provided me with useful insights on the hierarchy of processing, from stimulus to understanding, in perception and language.

Presenter at the Transcranial Magnetic Stimulation in Cognition Summer School at University College London, London

Period: Mei 2008

Organization: Dr Heidi Johansen-Berg & Professor Vincent Walsh

Description: Here, I presented a poster on my work from the master's project on "Virtual lesions of the inferior frontal gyrus during perception-action coupling". This intensive two-day course offering in-depth knowledge on the latest trends in TMS, and combining TMS with fMRI and other techniques. The course involved a series of lectures from experts in the novel research field of magnetic stimulation, discussions, and direct interactions with the lecturers.

Teaching experience

Lecturer Free-energy in social cognition

Period: Mei 2014

Course: Social Neuroscience

Supervisor: Prof. I. Toni

Description: Aim of this course in the research master programme in Cognitive Neuroscience was to provide students with current developments in Social Neuroscience. I developed and provided a lecture on the Free-energy principle in social cognition.

Lecturer Active inference and free-energy in perception and action

Period: October 2012

Course: Attention and performance

Supervisor: Dr. de Lange & Prof. A. Roelofs

Description: Aim of this course in the research master programme in Cognitive Neuroscience was to provide students with a state-of-the-art introduction to sensorimotor task performance and the role of attention in this process. I developed and provided a lecture on the Free-energy principle in perception and action.

Lecturer Conscious and Unconscious processes

Period: September 2011

Course: Conscious and unconscious processes

Supervisor: Prof. A.J. Dijksterhuis, Dr. C.P.M. van Halen, Dr. J.C.T.M. Karremans, Dr. M. Rinck & Prof. R. Vonk

Description: Aim of this 2nd year's bachelor's course in Psychology was to develop a reasoned opinion about the functions of human awareness from an empirical psychological perspective. My task was to lead and supervise the weekly discussion sessions.

Lecturer Theoretical Psychology

Period: September 2011

Course: Theoretical psychology for 2nd year's bachelor programme in Psychology

Supervisor: Dr. A.P.A. Roelofs

Description: Aim of this course was to gain insights into the important theories from the history of empirical psychology. My task was to supervise the practical sessions.

Lecturer Presentation Software Course

Period: October 2010

Course: Presentation software for Cognitive Neuroscience for junior and senior researchers

Supervisor: Ir. Pascal de Water

Description: Aim of this course was to teach Presentation software for Cognitive Neuroscience to junior and senior researchers. My task was to supervise the theoretical and practical sessions.

Teaching assistant (part-time) Bachelor Psychology

Period: December 2009 – January 2010

Course: Perception, action and development

Supervisor: Prof. Ruud Meulenbroek, Dr. Rob van Lier & Dr. Sabinne Hunnius

Description: Supervising the practical meetings of this 2nd years' course. My task is to guide the students in their practical assignments and assist them with their weekly homework.

Lecturer presentation software course

Period: October 2009
Course: Presentation software for Cognitive Neuroscience for junior and senior researchers
Supervisor: Ir. Pascal de Water
Description: Aim of this course was to teach Presentation software for Cognitive Neuroscience to junior and senior researchers. My task was to assist the participants during theoretical and practical sessions.

Lecturer (guest) Bachelor Psychology

Period: Mei 2009
Course: Social cognitive neuroscience
Supervisor: Dr. Hein van Schie
Description: I was invited to give a guest lecture on Joint Action in this 3rd years course of bachelors in Social Psychology.

Teaching assistant (part-time) Bachelor Psychology

Period: February 2008 – March 2008
Course: Brain & behaviour
Supervisor: Dr. Gilles van Luitelaar & Dr. Pieter Medendorp
Description: Supervising the practical meetings of this 1st years' course. My task was to guide the students in their practical assignments and assist them with their weekly homework.

Teaching assistant (part-time) Bachelor Psychology

Period: April 2007 – Mei 2007
Course: Cognitive psychology
Supervisor: Prof. dr. Harold Bekkering
Description: Supervising the group meetings of four different groups. My task was to lead the discussion and help the students with their weekly assignments.

Teaching assistant (part-time) Master in Cognitive Neuroscience

Period: September 2007
Course: Neuroanatomy
Supervisors: Dr. C.M. van Rijn & Dr. J.G. Veening
Description: Assisting with the practical part of the Neuroanatomy course. I was supervising the practical sessions in which human and rat brain dissections were conducted. The aim of this course is to give an overview of the function and structure of brain regions and circuitries involved in the processing of cognition, emotion and motion.

Grants**NWO Rubicon fellowship to work at the Institute of Neurology, University College London**

Period: December 2014
Amount: 153.000 euro
Description: Rubicon offers talented researchers the chance to gain experience at a top research institution outside the Netherlands, as international research experience is likely to be an advantage at a later stage in the applicant's academic career.

Other relevant experience

PhD representative Donders Institute for Brain, Cognition and Behaviour

Period: September 2008 – 2010

Description: As a PhD representative of the Donders Institute I represent the PhD group with respect to the directors of the Institute and the staff. I am informed and/or consulted in matters of specific relevance to the PhD students.

Chair, 1st Cognitive Neuroscience Conference Nijmegen (CNCN'08)

Period: September 2007 – May 2008

Description: As a chairman of the organizational committee I was coordinating the organization of the first student-run Cognitive Neuroscience Conference in Nijmegen (CNCN'08). The conference took place on 13 and 14 Mei 2008 in Nijmegen. Our aim was to bring together Cognitive Neuroscience graduate students and senior researchers from throughout Europe, and to encourage scientific collaboration between European universities.

Editor of the Proceedings of the Cognitive Neuroscience Master of Radboud University Nijmegen (Nijmegen CNS journal).

Period: September 2006 – September 2007

Description: In the first of my master's I joined the Nijmegen CNS, where I enjoyed learning every aspect of how to run a professional scientific journal. I was also a member of organization committee of our visit to Nature Publishing Group in London.

Vice Editor-in-chief of the Proceedings of the Cognitive Neuroscience Master of Radboud University Nijmegen (Nijmegen CNS journal).

Period: September 2007 – June 2008

Description: This year I was responsible for editing the Nijmegen CNS journal. I handled the whole publishing process, including author's submissions, selecting and communicating with the referees, selecting the articles to be published in the printed version of the journal.

Software Matlab, SPM, Brainsight (TMS), Brain Voyager, Presentation, SPSS, Adobe Illustrator

Languages

English:	fluent
Dutch:	fluent
Bosnian:	fluent
Italian:	basic
German:	moderate

List of Publications

Ondobaka, S., Hald, L. & Bekkering, H. (in press). Predictive embodied cognition. In J. Coello & M. Fisher (Eds.), *Foundations of Embodied Cognition*.

Ondobaka S, de Lange FP, Wittmann M, Frith CD, Bekkering H. Interplay Between Conceptual Expectations and Movement Predictions Underlies Action Understanding. *Cereb Cortex*. 2014

Ondobaka S, Newman-Norlund RD, de Lange FP, Bekkering H. Action recognition depends on observer's level of action control and social personality traits. *PLoS One*. 2013 Nov 22;8(11):e81392. doi: 10.1371/journal.pone.0081392.

Ondobaka S, Bekkering H. Conceptual and perceptuo-motor action control and action recognition. *Cortex*. 2013 Nov-Dec;49(10):2966-7. doi: 10.1016/j.cortex.2013.06.005.

Ondobaka S, Bekkering H. Hierarchy of idea-guided action and perception-guided movement. *Front Psychol*. 2012 Dec 27;3:579. doi: 10.3389/fpsyg.2012.00579.

Ondobaka S, de Lange FP, Newman-Norlund RD, Wiemers M, Bekkering H. Interplay between action and movement intentions during social interaction. *Psychol Sci*. 2012 Jan 1;23(1):30-5. doi: 10.1177/0956797611424163.

Newman-Norlund RD, Ondobaka S, van Schie HT, van Elswijk G, Bekkering H. Virtual Lesions of the IFG Abolish Response Facilitation for Biological and Non-Biological Cues. *Front Behav Neurosci*. 2010 Mar 3;4:5. doi: 10.3389/neuro.08.005.2010.

Ondobaka, S., Wittmann, M., de Lange F. P. & Bekkering, H. (submitted). Interregional connectivity minimizes surprise responses during action perception.

Ondobaka, S. & Monroy, C. (submitted). The role of prediction in infant and adult action perception.

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