Dr. David Wisniewski

Birthdate: 29.11.1982
Nationalities: German, Polish
Address: Henri Dunantlaan 2

9000 Gent Belgium

E-Mail: david.wisniewski@ugent.be **Website:** davidwisniewski.github.io

Twitter @wisneurowski

Research and Professional Experience

06/2017 – today FWO [PEGASUS]² Marie Skłodowska-Curie Fellow

Universiteit Gent, Belgium Research group leader Prof. Marcel Brass Research Focus

Interaction of intentional and motivational control processes using mainly

multivariate pattern analysis of fMRI data.

05/2016 – 05/2017 Postdoctoral Research Fellow

Universiteit Gent, Belgium Research group leader Prof. Marcel Brass Research Focus

Effects of high-level cognitive processes, such as instructions, onto low-level fear

learning mechanisms, using fMRI and psychophysiological measures.

Administrative and teaching tasks

Supervision of student experimental and master projects, teaching multivariate fMRI analysis methods, organizing visits of international guests

10/2008 – 04/2016 PhD Fellow

Bernstein Center for Computational Neuroscience, Berlin, Germany

SFB940 'Volition and Cognitive Control' Technische Universität Dresden,

Germany

Berlin School of Mind and Brain, Germany

Thesis Topic

The neural correlates of intentional control: Motivational effects and functional

organization, Grade: summa cum laude

Supervisor

Prof. John-Dylan Haynes

Research Focus

Interaction of motivational and intentional control processes in the brain and the functional architecture of the intentional control network, using multivariate

pattern analysis of fMRI data.

10/2014 - 05/2016 Lecturing

'Communication, Interaction, Teamwork': Teaching communicative skills to medical students, including patient simulations, at Charité Universitätsmedizin

Berlin, Germany

01/2013 – 05/2016 **Project management**

Administration and supervision of student assistants, organizing visits for

international guests

Supervision

Supervision of a doctoral thesis, master thesis and lab-rotation

Publications

Loose L*, **Wisniewski D***, Goschke T, Haynes JD. (2017) Switch independent task representations in frontal and parietal cortex, *bioRxiv* doi:10.1101/138230

[Abstract]

Wisniewski D, Goschke T, Haynes JD. (2016) Similar Coding of Freely Chosen and Externally Cued Intentions in a Fronto-Parietal Network. *NeuroImage*, 134: 450-58

[Abstract]

Wisniewski D, Reverberi D, Momennejad I, Kahnt T, Haynes JD. (2015) The Role of the Parietal Cortex in the Representation of Task–Reward Associations. *The Journal of Neuroscience*, 35: 12355–65

[Abstract]

Wisniewski D*, Reverberi C*, Tusche A, Haynes JD. (2015) The Neural Representation of Voluntary Task-Set Selection in Dynamic Environments. *Cerebral Cortex*, 25: 4715-26

[Abstract]

Tusche A, Kahnt T, **Wisniewski D**, Haynes JD. (2013) Automatic Processing of Political Preferences in the Human Brain. *NeuroImage*, 72: 174–82

[Abstract]

Wisniewski D. (2016) The neural correlates of intentional control: Motivational effects and functional organization. Doctoral thesis at Humboldt-Universität zu Berlin, Germany [Full Text]

Haynes JD, **Wisniewski D**, Görgen K, Momennejad I, Reverberi C. (2015) FMRI decoding of intentions: Compositionality, hierarchy and prospective memory. *Conference paper*: 3rd International Winter Conference on Brain-Computer Interface, South Korea

[Abstract]

Service to the Field

2016 – today Ad-hoc reviewer for Consciousness and Cognition

^{*=}these authors contributed equally

Grants

2017 – 2020 Incoming [PEGASUS]² Marie-Skłodowska-Curie Grant of the Research Foundation

- Flanders and the European Union's Horizon 2020 research and innovation

program.

Education

10/2002 - 10/2008 **Student**

Humboldt-Universität zu Berlin, Germany

Study Focus

Diploma in Psychology (equivalent to MSc), Grade: 1.3 (excellent)

Thesis topic: Cognitive Control in Eriksen Flanker Tasks, investigated using EEG

and dipole source localization

09/2006 - 03/2007 **Student**

University of Glasgow, UK (ERASMUS exchange)

Study Focus

EEG data analysis using dipole source localization

09/2007 – 06/2008 Student Assistant

Max Planck Institute for Human Development, Berlin

Center for Adaptive Behavior and Cognition Prof. Gigerenzer, Dr. Scheibehenne, Dr. Mata

Work Focus

Behavioral experimental design and programming

12/2004 – 12/2007 **Student Assistant**

Department of Psychology, Humboldt-Universität zu Berlin

Biological Psychology Group

Prof. Sommer and Prof. Abdel-Rahman

Work Focus

EEG experimental design, programming, data acquisition and analysis

Scholarships and Awards

ERASMUS exchange scholarship Max Planck PhD scholarship Mind and Brain PhD scholarship

Poster Prize of the Berlin School of Mind and Brain, 2010

Invited Talks

The functional organization of the intentional control network, Department of

Experimental Psychology, Prof. Brass, Ghent University

The neural basis of intentional and motivational control of behavior, Princeton

Neuroscience Institute, Prof. Botvinick and Prof. Cohen, Princeton University, NJ, USA

Dr. David Wisniewski

2014	The role of parietal cortex in the representation of task-reward-associations, Junior Research Group 'Decision-making in obesity: neurobiology, behavior & plasticity', Dr. Horstmann, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig
2013	The role of parietal cortex in the representation of task-reward-associations, Biological Psychology and Cognitive Neuroscience, Prof. Heekeren, <i>Freie Universität</i> , Berlin
2013	The neural code of voluntary task-set selection in dynamic environments, Center for Adaptive Rationality, Dr. Mata, <i>Max Planck Institute for Human Development</i> , Berlin
2012	The neural code of voluntary task-set selection in dynamic environments, Department of Psychology, Prof. Leuthold, <i>Universität Tübingen</i>
2012	The neural code of voluntary task-set selection in dynamic environments, Department of Experimental Psychology, Prof. Brass, <i>Ghent University</i>
2011	The neural code of voluntary task-set selection in dynamic environments, Graduate School of Systemic Neurosciences, <i>Ludwig-Maximilians-Universität</i> , München

Conference Talks

2016	Using MVPA to identify the functional organization of the cognitive control network,
	NeuroCog2016, Leuven [link]
2012	Predicting decisions in a dynamically changing environment from activation patterns in
	the dorso-medial prefrontal cortex, 2nd Einstein Fellowship Symposium on 'Decision-
	making', Berlin [link]

Conference Poster Presentations

2014	The role of parietal cortex in the representation of task-reward-associations, Annual Meeting of the Society for Neuroscience, Washington DC, USA
2014	The neural basis of task-reward associations, Neuronus IBRO & IRUN Neuroscience Forum, Krakow, Poland
2013	The neural basis of task-reward associations, Annual Meeting of the Organization for Human Brain Mapping, Seattle, USA
2011	Self-regulation of tasks under dynamic conditions, Interdisciplinary College on 'Autonomy, Decisions, and Free Will', Günne, Germany
2011	Self-regulation of tasks under dynamic conditions, Cognitive Neuroscience Society Meeting, San Francisco, USA
2010	The neural correlates of self-regulated behavior, Annual Meeting of the Society for Neuroscience, San Diego, USA

Key Skills

Design, conduction, analysis of fMRI, EEG, and behavioral experiments Univariate and multivariate pattern analysis of fMRI data Coding in Matlab, Python, and R Project management