

CV for German applicant

Name: Michael A. Nitsche

Leibniz Research Centre for Working Environment and Human Factors – IfADo, Germany

E-mail: nitsche@ifado.de

EDUCATION AND QUALIFICATIONS:

Habilitation (PD Dr. habil.) (2006)	Neurology, Georg-August-University Goettingen
Board Certification (Neurology) (2005)	Neurophysiology, Georg-August-University Goettingen
Doctoral Degree (Dr. Med.)(2000)	Medicine, Georg-August-University Goettingen
M.D. (1999)	Medicine, Georg-August-University Goettingen
Diploma in Psychology (1995)	Psychology, Georg-August-University Goettingen

PROFESSIONAL EXPERIENCES:

2015 – W3 Full Professor and Scientific Director, Leibniz Institut für Arbeitsforschung an der TU Dortmund, IfADo, Dortmund, Germany

2006 – 2015 Consultant (chief epileptologist) at Dept. Clinical Neurophysiology, University Medical Center, Göttingen

PUBLICATIONS:

Publication Summary Data

Number of peer-reviewed articles: 258

Citation Metrics: Scopus

Total Citations: 21,645

H-index: 79

10 Career Best Peer-Reviewed Articles:

1. Kuo, H.I., Paulus, W., Batsikadze, G., Jamil, A., Kuo, M.F., & **Nitsche, M.A.** (2016). Chronic enhancement of serotonin facilitates excitatory transcranial direct current stimulation-induced neuroplasticity. *Neuropsychopharmacology*, 4, 1223-1230.
2. Lupon, M.D., Batsikadze, G., Fresnoza, S., Grundey, J., Kuo, M.F., Paulus, W., Nakamura-Palacios, E.M., & **Nitsche, M.A.** (2015). Mechanisms of nicotinic modulation of glutamatergic neuroplasticity in humans. *Cerebral Cortex*, pii: bhv252. [Epub ahead of print]
3. Batsikadze, G., Paulus, W., Grundey, J., Kuo, M.F., & **Nitsche, M.A.** (2015). Effect of the nicotinic $\alpha 4\beta 2$ -receptor partial agonist varenicline on non-invasive brain stimulation-induced neuroplasticity in the human motor cortex. *Cerebral Cortex*, 25, 3249-3259.
4. Voss, U., Holzmann, R., Hobson, A., Paulus, W., Koppehele-Gossel, J., Klimke, A., **Nitsche, M.A.** (2014). Induction of self awareness in dreams through frontal low current stimulation of gamma activity. *Nature Neuroscience*, 17, 810-812.
5. Fresnoza, S., Paulus, W., **Nitsche, M.A.**, & Kuo, M.F. (2014). Nonlinear dose-dependent impact of D1 receptor activation on motor cortex plasticity in humans. *Journal of Neuroscience*, 34, 2744-2753.
6. Polanía, R., **Nitsche, M.A.**, Korman, C., Batsikadze, G., & Paulus, W. (2012). The importance of timing in segregated theta phase-coupling for cognitive performance. *Current Biology*, 22, 1314-1318.
7. Grundey, J., Thirugnanasambandam, N., Kaminsky, K., Drees, A., Skwirba, A.C., Lang, N., Paulus, W., & **Nitsche, M.A.** (2012). Neuroplasticity in cigarette smokers is altered under withdrawal and partially restituted by nicotine exposition. *Journal of Neuroscience*, 32, 4156-4162.
8. Polanía, R., Paulus, W., Antal, A., & **Nitsche, M.A.** (2011). Introducing graph theory to track for neuroplastic alterations in the resting human brain: a transcranial direct current stimulation study. *Neuroimage*, 54, 2287-96.
9. **Nitsche, M.A.**, Schauenburg, A., Lang, N., Liebetanz, D., Exner, C., Paulus, W., & Tergau, F. (2003). Facilitation of implicit motor learning by weak transcranial direct

CV for German applicant

current stimulation of the primary motor cortex in the human. *Journal of Cognitive Neuroscience*, 15, 619-626.

10. **Nitsche, M.A.**, & Paulus, W. (2000). Excitability changes induced in the human motor cortex by weak transcranial direct current stimulation. *Journal Physiology*, 15, 527 Pt 3:633-639.

FUNDING/SCHOLARSHIPS/AWARD:

Funding:

1. European Community, open FET program, LUMINOUS project, **(NITSCHÉ M.A.) (€ 567,162)**
2. Bundesministerium für Bildung und Forschung (BMBF): Gesundes Altern, TRAINSTIM WP2 (2015- 2020)**(Nitsche, M.A.)(€ 507,000)**
3. Bundesministerium für Bildung und Forschung (BMBF): Netzwerk psychischer Erkrankungen, GCBS, WP 2 (2015-2019)**(Nitsche, M.A.)(€ 331,000)**
4. Bundesministerium für Bildung und Forschung (BMBF): Transcranial electrical stimulation and analysis of neurovascular coupling (2013-2015) **(Nitsche, M.A.) (€ 476,000)**
5. Deutsche Forschungsgemeinschaft (DFG): Impact of the nicotinic alpha7 receptor on cortical plasticity in smokers and nonsmokers (2009-2015) **(Nitsche, M.A.)(€170,000)**
6. Deutsche Forschungsgemeinschaft (DFG): Dopaminergic modulation of plasticity in humans: Physiology and behavioral consequences (2009-2015) **(Nitsche, M.A.)(€329,000)**
7. Deutsche Forschungsgemeinschaft (DFG): Towards risk prediction of nicotine dependency by exploring individual limits of cortical neuroplasticity in humans (2006-2009) **(Nitsche, M.A.)(€253,000)**
8. Forschungsförderung der Medizinischen Fakultät der UMG (2006)(€25,000)
9. Kuratorium ZNS (2005)**(Nitsche, M.A.)(ca. € 45,000)**
10. Griebel-Stiftung (2004) **(Nitsche, M.A.)(ca. € 30.000)**

Prizes and Awards

- | | |
|------|--|
| 2012 | Richard Jung Award (Deutschen Gesellschaft für Klinische Neurophysiologie und Funktionelle Bildgebung, DGKN) |
| 2006 | GESET Award (German society of Electrostimulation and Electrotherapy) |
| 2001 | Alois Kornmüller Award (Deutschen Gesellschaft für Klinische Neurophysiologie und Funktionelle Bildgebung, DGKN) |

AD-HOC REVIEWER, GRANT ASSESSOR, INVITED LECTURES:

Editorial board

Journal of Neuroscience, Scientific Reports, Clinical Neurophysiology, Restorative Neurology and Neurosciences, Brain Stimulation

Advisory board

German Neuroscience Society (Member), FWO (Belgian Science Foundation) (Expert Panel), NIH Brain Initiative Non-Invasive Neuromodulation (Expert Panel)

Grant Assessor

Bayerische Forschungsförderung (Germany), Jubiläumsfonds der Österreichischen Nationalbank (Germany), Israel Science Foundation, Center for Integration of Medicine and innovative Technology (USA), Dutch Technology Foundation (Netherlands), FET program (European Commission), INSERM (France), Harvard Medical School (USA), Parkinson's Research Society (UK), Universität Rostock "Forum-Programm" (Germany), Wings for Life (Austria), Neurological Foundation of New Zealand, BBSRC, Bangor University (UK), Ministero dell'Istruzione (Italy), Sir Charles Gairdner Group (AUS), BBSRC (UK), DFG – German Research Foundation (GER), CINECA (Italy), MS Research Australia, Raine Medical Research Foundation, Medical Research Council (UK), Wellcome Trust (UK),

CV for German applicant

University Lausanne (Switzerland), , BA/Leverhulme Small Research Grants (UK), Johns Hopkins (USA), Czech Science Foundation, Garfield Weston Foundation (UK)

Journal reviewer (selected)

Ann Neurol, Arch Gen Psychiatry, Biol Psychiatry, Biol Psychology; BMC Neurosci, BMJ, Brain, Brain and Cognition, Brain Stimulation, Brain Topography, Cereb Cortex, Clin Neurophysiol, Cog Neurosci, Curr Biol, Curr Pharmaceutical Design, Current Biology, Epilepsy Res, Eur J Neurol, Eur Psychiatry, Front Human Neurosci, Frontiers in Neuropsychiatric Imaging and Stimulation, Hippocampus, Hum Brain Mapp, Int J Neuropsychopharmacol, J Affect Disord, J Cereb Blood Flow & Metabol, J Cog Neurosci, J Neural Engineering, J Neurophysiol, J Neurosci, J Pain, J Physiol, Journal of Cerebral Blood Flow & Metabolism, Neurobiol Aging, Neuroimage, Neurology, Neuromodulation, Neuropharmacology, Neuropsychologia, Neuropsychopharmacology, Neuro-Psychopharmacology & Biological Psychiatry, Neuroscience, NNR, Pain, Parkinson's Disease, Physiological Measurement, Physiology and Behavior, PLoS One, PNAS, Psych Bull, Restaur Neurol Neurosci, Schizophrenia Res, Science, Stroke, Trends Cog Sci

Selected invited Lectures (total > 50 invited lectures/presentations between 2012-2017)

- 2016 The 10th ICME International Conference on Complex Medical Engineering, August 4-6, Tochigi, Japan
- 2016 Donders Institute Toolkit of Cognitive Neuroscience, June 14-15, Nijmegen, Netherlands
- 2016 Taiwan Neurological Society, Annual Meeting, April 9-10, Taichung, Taiwan
- 2015 VII International Symposium in Neuromodulation, September 1, 2015, Sao Paulo, Brazil
- 2015 The 15th European Congress on Clinical Neurophysiology, Brünn, Czech Republic
- 2014 International Society for ECT and Neurostimulation Meeting, May 4, 2014, New York, USA
- 2014 International Meeting Cognitive Neuroscience, July 29, 2014, Brisbane, Australia
- 2013 Organization for Human Brain Mapping, OHBM, June 17, 2013, Washington DC, USA.
- 2013 Annual Meeting of the British Association for Clinical Neuropsychology, April 18-19, Nottingham, UK

Brief Biography

Professor Michael A. Nitsche is Director of the Dept. Psychology and Neurosciences at the Leibniz Research Centre for Working Environment and Human Factors in Dortmund, and holds a position as scientific staff member at the Dept. Neurology of the University Medical Center Bergmannsheil, Bochum, Germany. He studied Psychology and Medicine at the Georg-August-University in Goettingen, and performed his Dissertation in Medicine at the Max-Planck-Institute for Biophysical Chemistry in Goettingen. From 1999 until 2015, he was registrar and consultant at the Dept. Clinical Neurophysiology of the University Medical Center in Goettingen. He is a leading expert in plasticity research in humans, including non-invasive brain stimulation, neuropsychopharmacology, and cognition. He has received a number of grants from various funding organizations, including the German Research Foundation. He has published more than 250 papers in international peer-reviewed journals, and is a member of the editorial board of The Journal of Neuroscience, Scientific Reports, Clinical Neurophysiology, and Restorative Neurology and Neurosciences. He is a recipient of the prestigious Alois Kornmüller, and Richard Jung Awards by the German Society of Clinical Neurophysiology, and the GESET Award by the German society of Electrostimulation and Electrotherapy for his work on non-invasive brain stimulation in humans.