CV ANKE NINIJA KARABANOV

Contact Information

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1. Publications

H-Index of 15 (Source: Web of Science; Date: September 2019)

1. **Karabanov AN**, Irmen F, Madsen KH, Haagensen BN, Schulze S, Bisgaard T, Siebner HR, (2019) Getting to grips with endoscopy - learning surgical skills induces bi-hemispheric plasticity of the grasping network. NeuroImage (189), 32-44

2. Madsen KH*, **Karabanov AN*,** Krohne LG, Safeldt MG, Tomasevic L, Siebner H (2019). No trace of phase: Corticomotor excitability is not tuned by phase of pericentral mu-rhyth, Biorxiv. [* Shared first author]

3.

4. **Karabanov AN,** Saturnino GB, Thielscher A, Siebner HR. (2019) Can transcranial electrical stimulation localize brain function. Frontiers in Psychology *(accepted*)

5. **Karabanov AN**, Ritterband-Rosenbaum A, Christensen MS, Siebner H, Nielsen JB. (2017), Modulation of fronto-parietal connections during the rubber hand illusion, European Journal of Neuroscience, 45, 964-974

6. Dubbioso R, Raffin E, **Karabanov AN**, Thielscher A, Siebner H. (2017) Centre-surround organisation of fast sensorimotor integration in the human motor hand area. Neuroimage, 158, 37-47

7. **Karabanov AN**, Thielscher, A, Siebner H. (2016) Transcranial Brain Stimulation: Closing the loop between brain and stimulation. Current Opinions in Neurology, 29(4), 397-404

8. Bergmann TO, **Karabanov AN**, Hartwigsen G, Thielscher A, Siebner H. (2016) Combining non-invasive transcranial brain stimulation with neuroimaging and electrophysiology: Current approaches and future perspectives. Neuroimage. 140, 4-19
9. Hartwigsen G, Bergmann TO, Herz DM, Angstmann S, **Karabanov AN**, Raffin E, Thielscher A, Siebner H. (2016) Modeling the effects of non-invasive transcranial brain stimulation at the biophysical, network and cognitive level. Progress in Brain Research, 222, 261-287

10. **Karabanov AN**, Raffin E, Siebner HR (2015) The Resting Motor Threshold - Restless or Resting? Brain Stimulation, 8(5), 993-1006

11. Chao CC, **Karabanov AN**, Paine R, Carolina de Campos A, Kukke SN, Wu T, Wang H, Hallett M. (2015) Induction of Motor Associative Plasticity in the Posterior Parietal Cortex-Primary Motor Network. Cerebal Cortex, 25(2), 365-73

12. **Karabanov AN**, Ziemann U, Hamada M, George MS, Quartarone A, Classen J, Massimini M, Rothwell J, Siebner HR (2015) Probing Homeostatic Plasticity of Human Cortex With Non-invasive Transcranial Brain Stimulation. Brain Stimulation. 8(3) p. 442-54

13. **Karabanov AN**, Paine R, Chao CC, Schulze K, Scott B, Hallett M, Mishkin M (2015) Participation of the classical speech areas in auditory long-term memory. PLoS One. 10(3) e:0119472

14. **Karabanov AN**, Siebner, HR (2014) Expanding the electrotherapeutic toolkit, Acta Neuropsychiatrica, 26(5) p.261-3

15. Ritterband-Rosenbaum A*, **Karabanov AN***, Christensen MS, Nielsen (2014) 10 Hz rTMS over right parietal cortex alters sense of agency during self-generated movements. Frontiers Human Neuroscience, 25(8) [*shared first authorship], 417-522

16. **Karabanov AN**, Siebner HR (2014) Unravelling homeostatic interactions in inhibitory and excitatory networks in human motor cortex. Journal of Physiology, 15(590), 5557-8

17. **Karabanov AN**, Chao CC, Paine R, Hallett M. (2013). Mapping different intra-hemispheric parietal-motor networks using twin Coil TMS. Brain Stimulation 6(3), 384-9

18. **Karabanov AN**, Jin SH, Joutsen A, Poston B, Aizen J, Ellenstein A, Hallett M. (2012) Timing-dependent modulation of the posterior parietal cortex-primary motor cortex pathway by sensorimotor training. Journal of Neurophysiology, 07(11), 3190-9,

19. Houdayer E, Beck S, **Karabanov AN**, Poston B, Hallett M. 2012. The differential modulation of the ventral premotor-motor interaction during movement initiation is deficient in patients with focal hand dystonia. European Journal of Neuroscience, 5(3) 478-85

20. Forsman LJ, de Manzano O, **Karabanov AN**, Madison G, Ullén F. (2012) Differences in regional brain volume related to the extraversion-introversion dimension – a voxel based morphometry study. Neuroscience Research 72(1), 59-67,

21. **Karabanov AN**, Cervenka S, DeManzano O, Forssberg H, Farde L, Ullen F. (2010) Dopamine D2 receptor density in the limbic striatum is related to implicit but not explicit movement sequence learning. Proc Nat Ac Sci USA.107(16), 7574-9.

22. de Manzano O, Cervenka S, **Karabanov AN**, Farde L, Ullén F (2010) Thinking outside a less intact box: thalamic dopamine D2 receptor densities are negatively related to psychometric creativity in healthy individuals. PLoS One. Vol. 17;5(5) e:10670.

23. **Karabanov AN**, Blom O, Forsman L, Ullén F. (2009). The dorsal auditory pathway is involved in performance of both visual and auditory rhythms. Neuroimage. 44(2), 480-8.

24. **Karabanov AN**, Ullén F, Implicit and explicit learning of temporal sequences studied with the process dissociation procedure. (2009) Journal of Neurophysiology, 100(2),733-9

25. Madison G, Forsman L, Blom O, **Karabanov AN**, Ullen F. (2009) Correlations between intelligence and components of serial timing. Intelligence. 37, 68-75.

26. Ullén F, Forsman L, Blom O, **Karabanov AN**, Madison G. (2008) Intelligence and variability in a simple tapping task share neural substrates in the prefrontal white matter. Journal of Neuroscience, 28(16) p.4238-43

Proceedings Papers

1. **Karabanov AN,** Grønlund N, Mogensen, J, Lundell H, Siebner H. 2019. The dynamic modulation of interhemispheric inhibition during bimanual grip force control. BrainStimulation. 12(2) p.561
2. **Madsen, Safeld,** …
3. **Karabanov AN**, Bosch P, Konig P. 2008. Eye Tracking as a tool for investigating the comprehension of referential expressions in: Sam Featherston & Wolfgang Sternefeld (eds): Roots: Linguistics in search of its evidential base. De Gruyter, p.208-226

Book Chapters

1. **Karabanov AN**, Ziemann U., Classen J., Siebner H., Understanding Homeostatic Metaplasticity. (2012) In "A reference book for Transcranial Brain Stimulation" Carlo Miniussi, Walter Paulus, Paolo M Rossini (eds). Frontiers in Neuroscience Series

2. **Karabanov AN**, Lohse A, Siebner H: Hjernestimulation og Den forudsigende hjerne. (2016) in: Den Forudsigende Hjerne. Ed. Mark Schramm Christensen. Publisher: Hjerneforum

3. **Karabanov AN**, Hjorthkjær J: Musik i hjernen. (2019) in: Den Konstneriske Hjerne. Ed. CR Kruuse & NC Petersen. Publisher: Hjerneforum

2. Education

Since 2015	Courses in **Research Leadership** (2015; Region Hovedstadens Lederudviklingsprogram) and **Teaching and Learning in Higher Education** (2017-2018; Universitetspædagogikum, Københavns Universitet)
September 2009 – November 2010	**Doctor of Philosophy (PhD) in Medical Sciences,** *Karolinska Institute, Sweden and National Institute of Health, USA*
September 2002 – December 2005	**Bachelor of Science (BSc) in Cognitive Science,** *with distinction, University of Osnabrück, Germany*

3. Positions Held at Universities

May 2019	**Associate Professor** for Human Neurophysiology Across the Lifespan, *Department of Nutrition, Exercise and Sports, Københavns Universitet.* Establishing a Research Group focusing intersecting basic neurophysiology and motor control.
January 2017 -	**Research Area Coordinator** for all Brain Stimulation Research at the *Danish Research Centre for Magnetic Resonance, Hvidovre Hospital*. Develop common research strategy and coordination of all research efforts. Ensuring scientific and safety standards
January 2015 -	**Group Leader** Brain Stimulation Methods, *Danish Research Center for Magnetic Resonance, Hvidovre Hospital*. Methods development for brain stimulation and train researchers students in techniques
January 2015 -	**Senior Researcher** *Danish Research Center for Magnetic Resonance, Hvidovre Hospital*. Coordination of Research Projects and Research Supervision in the field of Motor Control and Brain Stimulation
November 2011 – December 2014	**Postdoctoral fellow** *Danish Research Center for Magnetic Resonance, Hvidovre Hospital* (50%) and *Department of Neuroscience, University of Copenhagen* (50%). Lead Investigator on several research projects within brain stimulation and brain imaging
November 2010 – November 2011	**Postdoctoral fellow** *National Institute of Mental Health, USA* Lead Investigator on brain stimulation research projects

4. Positions of Trust

2013 -	Reviewer NeuroImage (approximately 4-5 reviews per year)
2012 -	Reviewer Clinical Neurophysiology (approximately 1 review per year)
2011 -	Reviewer Brain Stimulation (approx. 5 reviews in total)
2011 -	Reviewer Cerebral Cortex (approx. 5 reviews in total)
2011 -	Occasional Reviewer for Brain, Cortex, Journal of Physiology European Journal of Neuroscience, Frontiers of Aging, Human Brain Mapping, Movement Disorder, Network Neuroscience (< 3 reviews per journal)
2016	Grant Proposal Reviewer - Israeli Science Foundation
2015	Grant Proposal Reviewer - Deutsche Forschungsgesellschaft

5. Grants Received

Personal	**Strategiske Forskningspulje Hvidovre Hospital** (300 000 DKK) **Swedish Research Council** (768 000 SEK) **Erik and Edith Fernstroms Stiftelse** (80 000 SEK)
Co-Pi	**Small Business Innovation Research Program** (224 911 USD - PI: Carly Kiselycznyk) **Lundbeck Foundation** (500 000 DEK – PI: Christina Kruuse) **Toyota Fonden** (300 000 DEK – PI: Thue Bisgaard)
Working Group Member	**Novo Nordisk Synergy Grant** (15 000 000 DKK - PI: Hartwig Siebner)

6. Academic Supervision

PhD Students	Co-Supervisor of three PhD Students (2 still ongoing)
Master Students	Co-Supervisor of 5 Master Students (1 ongoing)
Bachelor Students	Main-Supervisor of 1 Bachelor Student (project concluded)
Other Students	> 10 projects from Erasmus Students, Research Year students, International Research Assistants (Project duration 2-12 month, 2 projects ongoing)

7. International Network, Relations and Activities

International Network

Ullen Laboratory, *Karolinska Institutet, Sweden* (PI: Fredrik Ullen; Focus: Motor Learning, Musical Training, Physiological Flow; 7 publications, 1 ongoing project)

Human Motor Control Unit, *National Institute of Neurological Disorders and Stroke, USA*. (PI: Mark Hallett. Focus: Motor Learning, Brain Stimulation, Brain Plasticity; 5 publications)

Motor Control and Plasticity, *University Hospital Leipzig, Germany*. (Dr. Elinor Tzvi-Minker. Focus: Motor Learning, Brain Stimulation, Brain Plasticity; 3 ongoing projects)

Cognition and Plasticity, *Max Plank Institute, Leipzig, Germany*. (PI: Gesa Hartwigsen, Focus: Network Plasticity, Stroke, 2 publications, 1 ongoing project)

Neurophysiology and Rehabilitation, *University of Messina, Messina,Italy*. (PI: Angelo Quartarone, Dr. Tania Chillemi, Focus: Bimanual motor control, 1 ongoing project)

Workshops and Symposia

Organizer and Speaker (2019) "*Dynamic Network Modulation During Motor Learning*" Symposium at the Meeting of the German Society Clinical Neurophysiology

Organizer and Speaker (2014-2019) *International Non-Invasive Transcranial Brain Stimulation Workshop*, Hidovre Hospital, yearly 4- day workshop for 30 international researchers and medical professionals from Europe, Asia and the Americas

International Talks

7 Invited Institutional Talks University of Messina, University of Leibzig, University of Osnabrück, Stockholm Brain Institute (2x), John Hopkins University, National Institute of Neurological Disorders and Stroke

6 Conference Talks Human Brain Mapping, German Society of Clinical Neurophysiology, International Voice Symposium, Danish Society of Neuroscience, International Conference on Cognitive and Neural Systems, International Conference on Linguistic Evidence

Other Activities

Co-Founder at *BrainChild Technologies*:Neuroscience Start-Up, CEO: Dr. Carly Kiselycznyk. Location: Fredrick, Maryland. (https://gust.com/companies/brainchild-technologies)

8. Outreach activities

Popular Lectures

Forskningens Døgn 2018 - 5 popular lectures on "*Exercise and the Brain*", "*Mythbusters – Neuroscience Edition*" and "*Brain Stimulation*"

Kulturnatten 2016 – popular lecture and organizer of a show-and-tell exhibition at the Medical Museion. Topic: "*Electrify your brain – electric brain stimulation through the centuries*"

Popular Articles

Contributing Author Hjerneforum Books. *Hjernestimulation og Den forudsigende hjerne*. (2016), *Musik I Hjernen* (2019)

Media Appearance

Søndags Avisen, Danmarks Radio, Videnskapens Verden P1, GigaOm.com, Sveriges Television, Science Daily, Medicinsk Vetenskap

9. Parental leave

5/2013 - 01/2014 **Linnea Elise**

5/2017 - 01/2018 **Alva Sophie**