Alexander Sartorius

Narrative academic profile

Sartorius strongly focusses at two research areas: Clinical brain stimulations techniques like electroconvulsive therapy (ECT) and deep brain stimulation (DBS), and, second on preclinical high field functional imaging. He is head of the research group “Translational Imaging” since 2008. The research group aims to bridge the gap between preclinical and clinical research, which seems to be essential for e.g. drug development in psychiatric research. He has been funded by, and did/does lead research and contributed to large translational projects supported by the European Union grant system (EU-NEWMEDS and EU-AIMS, EU-ERA-Net-Neuron (NeuroMarket, Supphab, UNMET). He had several other national grants (e.g. National Network Computational Neuroscience (Bernstein-Center), DFG and DFG Priority Program (SPP 1629)).

He is member of two large international ECT research consortia: The Genetics of ECT International Consortium (gen-ECT-ic) and the Global ECT-MRI Research Collaboration (GEMRIC). He is heading the DGPPN section Electroconvulsive Therapy and is deputy head of the working group Electroconvulsive Therapy of the Consortium Neuropsychopharmacology (AGNP). He is also member of the DBS section of DGN/DGNC and of the EFFECT consortium.

Key output of the years 2020-now

Translational high field MRI:
The research group Translational Imaging uses validated genetic and behavioral animal models for various psychiatric illnesses. A high field (9.4T) animal MRI enables multiple intra-individual measurements and therefore better quantification of gene x environment x therapy interactions on brain function.

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Clinical brain stimulation research:
Regarding ECT his specific research fields are ECT anesthesia, maintenance ECT, quality markers of ECT, new indications, imaging and biomarkers of ECT, as well as ECT training.

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- Zilles-Wegner D, Kellner CH, Sartorius A. Thorough consideration of electroconvulsive therapy (ECT) in treatment-resistant psychiatric disorders. **Mol Psychiatry**. 2022 Jun 22.
- Karl S, Methfessel I, Weirich S, Rothermel B, Crozier J, Besse M, Reinhardt M, Buchmann J, Dück A, Schulz J, Zilles-Wegner D, Häßler F, Kölch M, Uebel von Sandersleben H, Poustka L, Sartorius A. Electroconvulsive Therapy in Children and Adolescents in Germany-A Case Series From 3 University Hospitals. **J ECT**. 2022 Jun 11.
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