TransMed/FTN Teaching Program 2023

Name der Veranstaltung		Transcranial Brain Stimulation: from Basics to Advanced Applications				
verantwortlicher Dozent/in	Akad. Titel Vorname Name	Prof. Dr. Til Ole Bergmann				
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weitere Dozent/innen (Akad. Titel Vorname Name)		Dr. Suhas Vijayakumar (suhas.vijayakumar@uni-mainz.de)				
Verantwortliche Einrichtung		Neuroimaging Center (NIC) Mainz				
Veranstaltungsform (Praktikum, Workshop, etc)		Workshop				
Veranstaltungsadresse		aging Center (NIC), University Medical Center Mainz, Bldg. 308c, Seminar Room 3. floor, 551				
Unterrichtssprache		English				
Beginn und Ende der Veranstaltung	Datum	von	27.11.2023	bis	29.11.2023	
Termine	Montag	von	10:00	bis	17:00	
	Dienstag	von	10:00	bis	17:00	
	Mittwoch	von	10:00	bis	17:00	
	Donnerstag	von		bis		
		von		bis		
maximale Teilnehmerzahl		20				
minimale Teilnehmerzahl		5				
Maximale **Fehltermine**		1				
Besondere Kriterien zur Erlangung der Credit Points		none				
Inhalt, bzw. Ziel der Veranstaltung Sonstige Bemerkungen		Non-invasive brain stimulation techniques such as transcranial magnetic stimulation (TMS), transcranial direct or alternating current stimulation (tDCS/tACS), and since recently also transcranial ultrasonic stimulation (TUS), are important tools in cognitive neuroscience and human neurophysiology. The ability to experimentally manipulate local neural activity allows the investigation of causal structure-function relationships that complement the correlative approach of neuroimaging and electrophysiology. "Online" approaches, assessing the immediate neural response to stimulation, can be used to (i) quantify neuronal network properties such as excitation, inhibition, or connectivity, (ii) interfere with ongoing spontaneous or task-related activity and thereby affect behavioral performance, or (iii) modulate the level and timing of neuronal activity. In contrast, "offline" approaches can be utilized to either (iv) inhibit or (v) facilitate local neuronal excitability via synaptic plasticity, assessing its subsequent effects on neural activity and behavior. This workshop consists of lectures and discussions covering the theoretical background on stimulation techniques, physiological mechanisms, experimental paradigms, and combination with neuroimaging/electrophysiology, as well as practical demonstrations and hands-on experience.				
ausgefüllt von		Prof. Dr. Til Ole Bergmann				
ausgefüllt am		24.07.2023				