



## **STIPED Symposium**

# Non-invasive brain stimulation in children and adolescents with neuropsychiatric disorders: recent experiences and perspectives



### Location

Hotel Condes de Barcelona Passeig de Gràcia, 73, Barcelona B 08008 Burdeos and Ambar Meeting rooms

## **Organizing Committee**

#### EVANGELISCHES KLINIKUM Bethel

Bethel -8

<u>Evangelisches Klinikum Bethel</u>, Bielefeld, Germany - Coordinator of STIPED Prof Michael Siniatchkin michael.siniatchkin@evkb.de Dr. Julia Siemann julia.siemann@evkb.de



ARTTIC Innovation GmbH, Munich, Germany – Partner in the project – ProjectManagement& Dissemination,Dr. Otilia Postea postea@arttic-innovation.de



<u>Neurolectrics SL</u>, Barcelona, Spain – Partner in the project and Local organizer Dr. Marta Castellano <u>marta.castellano@neuroelectrics.com</u> Dr. Rafal Nowak <u>rafal.nowak@neuroelectrics.com</u>





## Local organizing team



<u>Neurolectrics SL</u>, Avda. Tibidabo, 47 bis, 08035, Barcelona, Spain
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Name: Marta Castellano | Clinical Research Manager Title: Dr. rer. nat. Mail: marta.castellano@neuroelectrics.com Phone: +34 601 18 71 15 Name: Rafal Nowak | Technical Manager Title: Dr. rer.medic Mail: <u>rafal.nowak@neuroelectrics.com</u> | <u>rafal.nowak@gbhi.org</u> Affiliation: Atlantic Fellows, Global Brain Health Institute Phone: +34 93 254 03 63

## Programme

**Information for all presenters:** Please consider 25 minutes for your talk and allocate 5 minutes for discussion/questions (Q&A)

Tuesday, 31 May 2022			
08:45	Welcome coffee		
09:00	Welcome and short round of introductions	Michael Siniatchkin,	
		coordinator STIPED	
09:10	Introduction: Non-invasive electrical stimulation in	Michael Nitsche	
	neuropsychiatric disorders		
	tDCS in children		
09:40	TDCS in neurodevelopmental disorders: Overview &	Michael Siniatchkin	
	perspectives of the STIPED consortium		
10:10	tDCS in the pediatric brain: challenges and open	Vera Moliadze	
	questions		
10:40	Ethical considerations in the treatment of underage	Alena Buyx	
	clinical populations		
11:10	Coffee Break		
	Neurotherapy in treatment of ADHD		
11:30	Neurotherapies for ADHD: do they work?	Katya Rubia	
12:00	The right inferior frontal gyrus as a target for tDCS in	Kerstin Krauel	
	ADHD		
12:30	tDCS over the IDLPFC in ADHD: Impact of non-invasive	Alexander Prehn	
	brain stimulation on working memory performance		
13:00	Group photo		
13:15	Lunch break		





	Modelling for individualized brain stimulation	
14:00	Individualized EEG/MEG targeting and optimized multi-	Carsten Wolters
	channel transcranial electric stimulation in focal epilepsy	
14:30	Modelling of individual anatomy from MRI scans:	Oula Puonti
	application to children and adolescents	
15:00	Montage optimization in tDCS: advantages and future	Ricardo Salvador
	challenges	
15:30	Personalized field modelling: How good is it already, and	Axel Thielscher
	how do we improve it further?	
16:00	Coffee break	
16:30 -	Poster Session	
18:00		
19:00	Working Dinner - location tbc	

Wednesday, 1 June 2022					
tDCS for Autism and other neuropsychiatric disorders					
09:00	Overview of randomized controlled trials applying tDCS in major neurodevelopmental disorders: ADHD, autism and dyslexia	Ali Salehinejad			
09:30	The temporo-parietal junction as a target for tDCS in ASD Miguel Castelo Brand				
10:00	Feasibility and behavioral effects of anodal tDCS over the bilateral tempo-parietal junction in Autism Spectrum Disorder - results from a phase IIa randomized controlled trial.Christine Freitag				
10:30	Coffee Break				
Predicting outcome of brain stimulation					
11:00	EEG readouts as outcome measures for clinical trials	Emily Joes			
11:30	Predicting the individual's response to tDCS using	Christine Ecker, Caroline			
	neuroanatomical markers	Mann			
12:00	Unsupervised learning for NIBS patient stratification	Aureli Soria-Frisch			
13:00	Lunch break				
Advanced Application of tDCS					
13:30	Non-invasive brain stimulation in children and adolescents with Specific Learning Disorders: evidence for effectiveness and perspectivesDeny Menghini				
14:00	Neuromodulation of the frontal brain - benefits of integrating multimodal off- and online neuroimaging methods	Daniel Keeser			
14:30	Opportunities and risks of home-based tDCS for children and adolescents with ADHD	Fabienne Schlechter			
15:00	Concluding remarks & Discussions Michael Siniatchkin				
16:00	End of Symposium				





## Symposium speakers:

First name	Last name	Organisation	E-Mail
Deni	Menghini	Bambino Gesu Hospital,	deny.menghini@opbg.net
		Neuroscience, Roma, Italy	
Alena	Виух	Technical University Munich	a.buyx@tum.de
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	Branco		
Christine	Ecker	Goethe University Frankfurt	christine.ecker@kgu.de
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Emily	Jones	Centre for Brain & Cognitive	e.jones@bbk.ac.uk
		Development	
		Birkbeck, University of London	
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Daniel	Keeser	Department of Psychiatry and	daniel.keeser@med.uni-muenchen.de
		Psychotherapy	
		Department of Radiology	
Kerstin	Krauel	University of Magdeburg	kerstin.krauel@med.ovgu.de
Caroline	Mann	Goethe University Frankfurt	Caroline.Mann@kgu.de
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Oula	Puonti	DRCMR/RegionH Copenhagen	oulap@drcmr.dk
Alexander	Prehn-	ZIP, Kiel	Alexander.prehn-kristensen@uksh.de
	Kristensen		
Katya	Rubia	King's College London ·	katya.rubia@kcl.ac.uk
		Department of Child and	
		Adolescent Psychiatry	





Mohammed	Salehinejad	TU Dortmund	salehinejad@ifado.de
Ali			
Ricardo	Salvador	Neuroelectrics, Barcelona	ricardo.salvador@neuroelectrics.com
Fabienne	Schlechter	Child and Adolescence	fabienne.schlechter@uni-bielefeld.de
		Psychiatry, EvKB Bielefeld	
Michael	Siniatchkin	Child and Adolescence	Michael.Siniatchkin@evkb.de
		Psychiatry, EvKB Bielefeld	
Aureli	Soria-Frisch	Starlab, Barcelona	aureli.soria-frisch@starlab.es
Axel	Thielscher	DRCMR/RegionH Copenhagen	axelt@drcmr.dk
Carsten	Wolters	SAB/University of Münster	carsten.wolters@uni-muenster.de

### Posters:

- 1. Transcranial Direct Current Stimulation and executive functions among children and adolescents: an overview (Dr. Julia Siemann, Child and Adolescence Psychiatry, EvKB, Germany, julia.siemann@evkb.de)
- 2. Therapy in a home-based setting: An adaptive, digital working memory training for children and adolescents with ADHD (M.Sc. Fabienne Schlechter, Child and Adolescence Psychiatry, EvKB, Germany, Fabienne.schlechter@evkb.de)
- 3. Neural correlates of intention attribution in children and adolescents with Autism Spectrum Disorder (Dr. Christine Luckhardt, Department of Child and Adolescent Psychiatry, Psychotherapy and Psychosomatics, GU, Germany, Christine.luckhardt@kgu.de)
- Perceptual expectations differentially modulate neural correlates of perception and attention during visuospatial orienting in children and adolescents with Autism Spectrum Disorder (Department of Child and Adolescent Psychiatry, Psychotherapy and Psychosomatics, GU, Germany, sara.boxhoorn@kgu.de)
- 5. The impact of bilateral anodal tDCS over left and right DLPFC on executive functions in children with ADHD (Ali Salehineyad)
- 6. Does tDCS influence voice processing in teenagers with autism? An fMRI case study of 3 teenagers (Camille Ricou)
- 7. Theta-phase gamma-amplitude coupling during working memory and interference control processes in children with ADHD work in progress (Hannah Brauer)
- 8. Optimize parameters for effective transcranial direct current stimulation (tDCS) basedon individual modelling (Dania Stolle)
- 9. Influence of tDCS on emotion regulation processes in adolescents with psychiatric disorders (Isabel Wrachtrup-Calzado)





- 10. Boosting numerical cognition in children and adolescents with dyscalculia by transcranial random noise stimulation and cognitive training: preliminary data of a randomized clinical trial (Giulia Lazzaro 1, Andrea Battisti 1,2, Cristiana Varuzza 1, Laura Celestini 1, Pierpaolo Pani 3, Floriana Costanzo 1, Stefano Vicari 1,4, Roi Cohen Kadosh 5,6 and Deny Menghini 1)
- 11. The efficacy of non-invasive brain stimulation in the treatment of adolescents with Anorexia Nervosa: preliminary data of a randomized clinical trial Luciana Ursumando 1, Giulia Lazzaro 1, Viviana Ponzo 2, Alessio Maria Monteleone 3, Deny Menghini 1, Elisa Fucà 1, Silvia Picazio 4,5, Romina Esposito 4, Giacomo Koch 4,6, Valeria Zanna 1, Stefano Vicari 1,7, Floriana Costanzo1

## **Location details**

#### Hotel Condes de Barcelona

Passeig de Gràcia, 73, Barcelona B 08008 Tel: +34 93 445 00 00; Fax: +34 94 445 32 32 E-mail: <u>info@condesdebarcelona.com</u> <u>Hotel Condes de Barcelona in Passeig de Gracia | Official Web</u> Burdeos and Ambar Meeting rooms

## **Travel itinerary**

The meeting will take place at the HOTEL CONDES DE BARCELONA as indicated above.



#### How to get to the Hotel Condes de Barcelona?

If you are coming to Barcelona by plane.

#### Taxi from the Airport





El Prat airport is 12 km from Barcelona. This route can be made by taxi, which will take around 23 minutes and cost around 35€ to 40€.

#### Train and underground

- From Airport Terminal 2 a direct train line is <u>R2N Saint Celoni</u>. In around 27 minutes it will leave you in **Passeig de Gràcia**. Then in a 3 minutes' walk you will reach the hotel.
- From **El Prat de LLobregat** you can take the line <u>R2S Barcelona-Estació de Franca</u> 19 minutes until **Passeig de Gràcia.** Then in a 3 minutes' walk you will reach the hotel.



• Another option also from **Airport Terminal 2** is the line <u>L9S Zona Universitaria</u> until **Collblanc**. There switch to Line <u>L5 Vall d'Hebron 6</u> stops until **Diagonal** and in a 4 minutes' walk you can reach the hotel.



If you purchase the T-10 card for 10 trips, you will be able to use it not only to get to the hotel, but also to move around Barcelona for the duration of your stay, as it allows you to utilise the different means of public transport in the city.

#### Bus from the airport

- From Airport Terminal B you can use the line <u>A2</u> to Pl. Catalunya Fontanella and then two minutes' walk to Ronda St Pere Pg de Gràcia where you can take line <u>22 or 24 El Carmel</u> to Pg de Gràcia Mallorca. In 1 minute walk you will reach the hotel.
- From Airport Terminal 1 you can take the line <u>A1 to Pl. Catalunya Andana Central</u>. Then two minutes' walk to Ronda St Pere Pg de Gràcia where you can take line <u>22 or 24 El Carmel</u> to Pg de Gràcia Mallorca. In 1 minute walk you will reach the hotel.



Dinner location 31<sup>st</sup> of May – TBC