

9TH INTERNATIONAL SYMPOSIUM

NAVIGATED BRAIN STIMULATION

in Neurosurgery & Neuromodulation



20-21 OCT, 2017
Berlin, Germany



FRIDAY, OCTOBER 20

(The Nordic Embassies, Felleshus)

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| 11.30-12.00 | Registration |
| 12.00-12.10 | Opening of the symposium (Aleksi Vakkuri,
Counsellor at Ministry for Foreign Affairs of Finland) |

MOTOR MAPPING (Chair: Prabhu)

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| 12.10-12.30 | Overview & update (Picht) |
| 12.30-13.00 | Implementation of nTMS in an experienced IOM setup
(Seidel) & discussion |
| 13.00-14.00 | Rapid fire presentations & discussions |
| 14.00-14.40 | <i>Coffee break</i> |

MAPPING CHILDREN (Chair: Tarapore)

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| 14.40-15.10 | Overview & update (Rotenberg) |
| 15.10-15.30 | Rapid fire presentations & discussions |
| 15.30-16.00 | <i>Coffee break</i> |

INSPIRATIONS FROM NEUROMODULATION (Chair: Vajkoczy)

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| 16.00-16.20 | Overview & update (Nurmikko) |
| 16.20-16.45 | A journey from motor mapping to advanced
neuromodulation (Tarapore) |
| 16.45-17.00 | PAS for spinal cord injury (Shulga) |
| 17.00-17.15 | nTMS for pain treatment (Vaalto) |
| 17.15-17.30 | rTMS in clinical practice for pain treatment (Ruiz) |
| 17.30-18.00 | <i>Coffee break</i> |
| 18.00-18.15 | nTMS for stroke treatment (Tscherpel) |
| 18.15-18.25 | nTMS-EEG for stroke treatment (Sarasso) |
| 18.25-19.00 | Rapid fire presentations & discussions |

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| 19.00 | Get-together dinner |
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RAPID FIRE on FRIDAY

12:00 MOTOR MAPPING (Chair: Prabhu)

13:00-14:00 Rapid fire presentations & discussions

1. Validation of the Berlin Risk Stratification Model (**Rosenstock**)
2. The impact of nTMS motor mapping on radiation treatment planning (**Schwendner**)
3. Reappraising Penfield & Boldrey's motor homunculus (**Howells**)
4. Preservation of Motor Maps with Increased Motor Evoked Potential Amplitude Threshold in RMT Determination (**Lucente**)
5. Mapping cortical motor representations using navigated TMS in amyotrophic lateral sclerosis (**Bakulin**)
6. Improved mapping of cortical motor representations (**Pitkänen**)
7. Organization of the functional primary motor cortex measured using sulcus-aligned mapping and anisotropy index – report on initial findings (**Reijonen**)

14:40 MAPPING CHILDREN (Chair: Tarapore)

15:10-15:30 Rapid fire presentations & discussions

8. Left perisylvian tumor surgery aided by TMS language mapping in a 6-year-old boy: case report (**Rosenstock**)
9. A developmental study on motor representation areas of upper limb muscles in healthy children, adolescents and adults (**Säisänen**)

16:00 INSPIRATIONS FROM NEUROMODULATION (Chair: Vajkoczy)

18:25-19:00 Rapid fire presentations & discussions

10. Navigated alpha frequency rTMS in treatment resistant schizophrenia (**Säisänen**)
11. Feasibility of pre-surgical functional mapping of visual areas using nTMS-tractography (**Giampiccolo**)
12. Using functional MRI to determine S2 and confirm M1 as stimulation targets for rTMS pain treatment (**Voigt**)
13. rTMS over M1 vs. S2 to reduce upper-limb chronic neuropathic pain – a protocol and case report (**Voigt**)
14. Predicting the treatment response to rTMS therapy in chronic neuropathic pain (**Säisänen**)
15. Investigating interactions between cognitive and sensory brain networks – a combined rTMS-fMRI study (**Sollmann**)

SATURDAY, OCTOBER 21

(The Nordic Embassies, Felleshus)

BREAKFAST SEMINARS - CHOOSE YOUR OPTIONS

08:30-10:00

Option 1: Pre-operative planning & DTI
(Picht, Prabhu) *Lounge*

Option 2: Motor & language mapping live session
(you can bring your own MRI)
(Krieg, Tarapore) *Auditorium*

Option 3: Pediatric mapping, protocol hand outs
(Rotenberg) *Conference room*

LANGUAGE MAPPING (Chair: Mäkelä)

10:00-10:20	Overview & update (Krieg)
10:20-10:45	Implementation of nTMS language mapping (Prabhu, Bastos)
10:45-11:30	Rapid fire presentations & discussions
11:30-13:00	<i>Lunch & discussions</i>

KEYNOTE LECTURE

13:00-14:00	Innovations in Neurosurgery (Stefan Vilsmeier, President & CEO; Brainlab)
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MULTICENTER TRIALS

14:00-14:20	Update on ongoing trials (Krieg & Picht)
14:20-14:30	Best abstract award & closing of symposium

RAPID FIRE on SATURDAY

10:00 LANGUAGE MAPPING (Chair: Mäkelä)

10:45-11:30 Rapid fire presentations & discussions

16. Preoperative planning based on repetitive nTMS improves surgical treatment of language-eloquent brain tumors (**Raffa**)
17. Implementing verb tasks in nTMS language mapping to improve map reliability compared to DES mapping (**Ohlerth**)
18. Investigating voice-onset latency differences between the first and second language in bilinguals (**Schramm**)
19. Unique mapping & registration method for nTMS & DECS (**Colle**)
20. Cortical plasticity of language function in glioma patients as measured by nrTMS (**Ille**)
21. Robustness and reliability of a normative picture set for German-speaking subjects (**Pieczewski**)
22. DTI fiber tracking of arithmetic processing pathways based on results of rTMS in brain tumor patients and correlation with postoperative outcome (**Ille**)
23. The impact of different tractography algorithms on nTMS language map connectivity (**Fekonja**)

WELCOME TO BERLIN!

BREAKFAST SEMINARS

Please choose from the 3 options on Saturday morning and register by the registration desk. Continental breakfast will be provided.

THIS YEAR'S INVITED KEYNOTE SPEAKER:

Stefan Vilsmeier,
President and CEO of Brainlab

ABSTRACTS

Abstracts will be evaluated for rapid fire presentations in the respective main sessions. All abstracts ranging from single case experiences and preliminary results from ongoing research to conceptual studies and reviews were welcomed.

The auditorium will select the best presentations, which will be awarded with vouchers of 500 euro for the winner, and 300 and 100 euro each for the runner-ups.

VENUE

The Nordic Embassies, Fellehus
Rauchstrasse 1
D-10787 Berlin

FACULTY

Thomas Picht, Charité/Berlin
Sandro Krieg, TU Munich
Anna Roethe, HU/Berlin
Bernhard Meyer, TU Munich
Peter Vajkoczy, Charité/Berlin

