



IONM Advanced Summer School of the DGKN/FBA



Contents

The topics cover the entire spectrum of the Basics courses and serve to deepen knowledge, particularly with regard to practical application techniques and interpretation. In addition to the hands-on content of the Basics courses, there will also be a focus on intraoperative neurography and neurosonography.

Dates

28 April to 01 May 2024

Registration

Please send a short letter of interest along with a list / prove of previous courses/experience in the context of perioperative and intraoperative mapping and neuromonitoring to the head office of the German Society of Clinical Neurophysiology:

sekretariat@dgkn.de

The acceptance of your registration will be dependent on the total number of applicants and on your personal level of expertise.



Notes

The total number of participants is limited to 25. Members of the DGKN and the respective IONM curriculum will be granted priority access.

Each participant should bring a clinical case report (3 slides, 3-4 minutes speaking time) related to at least one of the course topics, in which he/she also briefly introduces him/herself or his/her clinical focus. The best case will be awarded.

In addition, the case presentation is included as a criterion for successful confirmation of participation, which is made up as follows: (1) case presentation, (2) practical examinations, (3) final written examination.

- The times are Portuguese local time, i.e. CET (Berlin) +1h -

Programme

DAY 1 | Sunday, 28.04.2024

Time of day	Programme item	Lecturer(s)	Moderation if necessary
approx. 17:00	Departure bus transfer Lisbon airport		
approx. 19:00	Reception Herdade da Urgueira		
19:30	Opening and keynote "Why we need neuromonitoring in brain surgery"	Campos	Szelényi, Weiss Lucas
	History of neuromonitoring	Moll	
from 20:30	Dinner with discussion		



DAY 2 | Monday, 29.04.2024

Time, station	Programme item	Lecturer(s)	Moderation if necessary
08:00	Breakfast seminar on epilepsy surgery		Rampp, Noachtar
08:00	Neurophysiological indication	Noachtar	
08:20	Anatomical challenges in epilepsy surgery	Giampiccolo	
08:35	Practical implications of IONM for the surgical strategy (illustrative cases)	Campos	
08:50	Slot for max. 4 cases brought along		
09:15	Hands on Block 1 - <i>1st half (2 rotations, every 30 min. → 60 min. duration)</i> Epilepsy and supratentorial resections with sensorimotor monitoring		
	1 Epilepsy: non-invasive source localisation, ECoG, sEEG	Rampp, Noachtar, Campos, Giampiccolo	
	2 Preoperative functional localisation of sensorimotor function: nTMS	Weiss Lucas, Lavrador, Pedro	
	3 Supratentorial vascular: sensorimotor mapping and monitoring	Szelényi, Rosahl	
	4 Supratentorial tumour: sensorimotor mapping and monitoring	Seidel, Vergani	
10:15	Coffee break		
10:45	Hands on Block 1 - <i>2nd half (2 rotations, every 30 min.) - contents see above.</i> Epilepsy and supratentorial resections with sensorimotor monitoring		
12:00	Lunch		
13:15	Lunch seminar		Seidel, Sabel
	Awake mapping and monitoring of communicative functions	Vergani	
14:00	Slot for max. 6 cases brought along		
14:45	Hands on Block 2 - <i>1st part (2 rotations, every 30 min.)</i> Cognitive mapping and monitoring, special neurophysiological techniques for deep brain stimulation indications		
	1 Awake surgery of supratentorial tumours with <i>cortical</i> language/cognition mapping & monitoring (role play)	Sabel, Szelényi	
	2 Preoperative speech/cognitive mapping, nTMS-supported	Weiss Lucas, Lavrador, Pedro	



	3	Subcortical mapping and monitoring of the speech and communication network: awake versus asleep	Seidel, Giampiccolo
	4	Functional neurosurgical indications (DBS special techniques)	Moll
15:45	Coffee break		
16:15	Hands on Block 2 - 2nd part (2 rotations, every 30 min. → total 60 min.) - contents see above. Cognitive mapping and monitoring, special neurophysiological techniques for deep brain stimulation indications		
17:15	Short break		
17:30	Practical examination block P1 (4 rotations, every 15 min.) Exam contents: Hands-on topics of the day		
	1	Supratentorial tumour (intraop)	Seidel, Sabel
	2	Non-invasive functional localisation	Weiss Lucas, Pedro
	3	Supratentorial-vascular	Szelényi, Rosahl
	4	Functional neurosurgical indications (epilepsy, DBS)	Rampp, Moll
18:30	Break		
19:00	Evening seminar		Weiss Lucas, Moll
	Slot for max. 4 cases brought along		
19:25	TMS language mapping - challenges and perspectives		Lavrador
	TMS-EEG: on the way to a network perspective in mapping		Tscherpel
20:00	End of programme		
from 20:15	Dinner with discussion		



DAY 3 | Tuesday, 30.04.2024

Time, station	Programme item	Lecturer(s)	Moderation if necessary
08:00	Breakfast seminar		Pedro, Szelényi
08:00	Preoperative neurophysiology and neurosonography in the indication for nerve surgery	Nagi	
08:20	Applied Neuroanatomy KHBW/ Brainstem (Surgical Approach)	Seidel	
08:40	Slot for max. 5 cases brought along		
09:15	Hands on block 3 - 1st half (2 rotations, every 30 min. → 60 min.) (Brain) nerve monitoring and neurosonography		
	1 Monitoring of the optical system (VEP)	Szelényi	
	2 AKN/KHBW, Focus AEP	Rosahl	
	3 Brainstem/KHBW, Focus Facialis	Rampp, Seidel	
	4 Nerve 1: Focus on neurography	Pedro, Nagi	
	5 Nerve 2: Focus on neurosonography	König	
10:15	Coffee break		
10:45	Hands on Block 3 - 2nd half (3 rotations, all 30 min. → 90 min.) - see above for contents. (Brain) nerve monitoring and neurosonography		
12:15	Lunch		
13:30	Lunch seminar		Rosahl, König
	Why neuromonitoring in spinal neurosurgery?	Thomé	
13:50	Slot for max. 8 cases brought along		
14:45	Hands on Block 4 - 1st part (1 rotation, every 30 min. → 30 min.) Spinal mapping and monitoring, non-invasive neuromodulation		
	1 Neuromonitoring during orthopaedic interventions	Szelényi	
	2 Non-invasive neuromodulation and investigation of the excitability of the corticospinal system using nTMS	Weiss Lucas, Lavrador	
	3 Mapping for intramedullary procedures	Seidel, Pedro	
	4 Monitoring during intradural interventions	Rosahl, König	



15:15	Coffee break
15:45	Hands on Block 4 - 2nd part (3 rotations, all 30 min. → total 90 min.) - see above for contents. Spinal mapping and monitoring, non-invasive neuromodulation
17:15	Short break

Continuation day 3, 30.04.2024

Time, station	Programme item	Lecturer(s)	Moderation if necessary
17:30	Practical examination block P2 (3 rotations, every 15 min.) Exam contents: Hands-on topics of the day		
1	Peripheral nerves	Pedro, König, Nagi	
2	Spinal	Szelényi, Seidel	
3	Cranial nerves	Rampp, Rosahl	
18:15	Optional: Excursion to the surrounding area / creative break		
From 20:00	Dinner with social programme under the motto "Neurosurgery is cooking, Neuromonitoring is..."	Sabel, Moll	Rampp



DAY 4 | Wednesday, 01.05.2024

Time of day	Programme item	Lecturer(s)	Moderation if necessary
08:15	Breakfast seminar: Perspectives		Rosahl
	... of the IONM during functional neurosurgical interventions	Moll	
	... from AI in the IONM	Rampp	
08:45	Written exam		Faculty
09:15	Feedback and open discussion, farewell	all	Szelényi, Weiss Lucas
10:15	Departure bus transfer to Lisbon airport (arrival approx. 12:15)		

Lecturers

Alexandre Campos | Lisbon
Davide Giampiccolo | London
Ralph König | Günzburg
José Lavrador | London
Christian Moll | Hamburg
Michael Nagi | Munich
Sohey! Noachtar | Munich
Maria Pedro | Günzburg
Stefan Rampp | Erlangen

Steffen Rosahl | Erfurt
Michael Sabel | Düsseldorf
Kathleen Seidel | Bern
Andrea Szelényi | Munich
Claudius Thomé | Innsbruck
Caroline Tscherpel | Frankfurt
Francesco Vergani | London
Carolin Weiss Lucas | Cologne

The ratio of lecturers to participants is expected to be 1:3.

Lecturers do not receive a fee, but receive up to EUR 300 towards travel expenses and free board and lodging during the course or are exempt from the participation fee.

The planned group of lecturers is essentially made up of lecturers from the Basics courses, supplemented by invited overview lectures.



Transparency

The event costs are not co-financed by industry funds. The industry's contribution to the event consists solely of the provision of equipment free of charge.

With the kind non-financial support of the following companies:

Canon (2 loan devices)
Dr Langer (1 loan device)
Inomed (4 loan devices)
Nexstim (1 loan device)
Nihon Kohden (1 loan device)
OlphaOmega (1 loan device)
Stryker (2 loan devices)

Participation fees

The participation fees below **include** the bus transfer from/to Lisbon airport as well as the costs for **accommodation** (in double occupancy of twin-bedded rooms! Single rooms at extra costs upon request) **and catering** (incl. drinks flat rate; excl. high-proof spirits and cocktails). In case of external accommodation (self-organised), a discount of 100€ will be applied. The travel from home to and from Lisbon airport must be organised independently and is not included in the price.

Non-medical staff*	EUR 450
Medical assistants	EUR 490
Specialist medical staff	EUR 540

* e.g. TA, students, scientists or medical staff with part-time employment and comparable income category (approx. TVL-9, 100%), e.g. on parental leave

The passive participation fee (e.g. for industry staff) is EUR 300 and includes full catering (but not accommodation). External dinner participation (e.g. of family members) is generally possible upon request at the cost of 40€ / dinner including drinks (hot and cold non-alcoholic drinks, beer, wine).

Location (www.herdadedaurgueira.com)

Accommodation: Hotel "Herdade da Urgueira" and Hotel „Rupestre“ in Vila Velha de Ródão
At the conference venue, flats and rooms of various sizes are available. The flats are spacious and have a terrace and kitchenette. Due to limited on-site capacity, it is necessary for participants to share twin rooms. The location is rented exclusively for the course.

Additional rooms have been pre-booked at <https://www.rodaohotel.com> and offer limited accommodation possibilities for family members and in single rooms (upon request).

Catering: Hotel restaurant "Meio do Nada"

The participation fee includes three dinners, two lunches and four coffee breaks as well as drinks (hot and cold non-alcoholic drinks, beer, wine included).