

essfn  
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for Stereotactic and Functional Neurosurgery

MARSEILLE INDIVIDUAL BRAIN PREDICTION

France

PALAIS DU PHARO

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08 > 11  
September



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# TRANSFORMING DBS THERAPY BEYOND TECHNOLOGY



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#### References

1. Neumann WJ, Staub F, Horn A, et al. Deep brain recordings using an implanted pulse generator in Parkinson's disease. *Neuromodulation*. 2016;19(1):20-24.
2. Leakage requirement Doc: NDHF1513-145311. Patent: 7,83,365 (24 Aug, 2010)
3. Medtronic Manual M968090A - 0.5 mm Spaced Lead Assembly
4. Medtronic Manual M972500A - 1.5 mm Spaced Lead Assembly
5. Medtronic Internal Report NDHF1513-164903, DBS System Requirements, SR 340792, SR 340795
6. Medtronic Manual M970702A001

\* Signal may not be present or measurable in all patients. Clinical benefits of brain sensing have not been established.

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08:00

C10

08:00 - 13:00

**SATELLITE COURSE IN ADVANCED IMAGING**  
**Brain Imaging - Postprocessing in Functional Neurosurgery**Moderators: **Nadine GIRARD (France)**, **Viktor JIRSA (France)**, **Ludvic ZRINZO (United Kingdom)**

- 08:00 ■ Basics MR. **Jean-Philippe RANJEVA (France)**
- 08:30 ■ Stereotactic MRI. **Ludvic ZRINZO (United Kingdom)**
- 09:00 ■ Statistical approach of the functioning brain. **Demian BATTAGLIA (France)**
- 09:30 ■ Morphometry in the brain, VBM .... **François MANGIN (France)**
- 10:00 ■ Coffee Break.
- 10:30 ■ Tractography. **Harith AKRAM (United Kingdom)**
- 11:00 ■ Functional connectivity Resting state MRI. **Constantin TULEASCA (Switzerland)**
- 11:30 ■ PET. **Eric GUEDJ (France)**
- 12:00 ■ Multimodality approaches and ultra-high field MRI. **Maxime GUYE (France)**
- 12:30 ■ Discussion.

Espace  
Vieux-Port

D10

08:00 - 14:30

**EANS ESSFN EUROPEAN DIPLOMA OF RADIOSURGERY**  
**Vascular**Moderators: **Bodo LIPPITZ (Germany)**, **Selcuk PEKER (Turkey)**

- 08:00 ■ I - Arterio Venous Malformations.
- 08:00 ■ a) Basics, radiobiology predictive factors, angioarchitecture & technical issues. **Jean REGIS (France)**
- 08:30 ■ b) Patient selection, natural history, bleeding risk predictors role of imaging modalities, scoring. **Piero PICOZZI (Italy)**
- 09:00 ■ c) Follow up, Outcome, definition of cure, management of failures. **Brigitte GATTERBAUER (Austria)**
- 09:30 ■ d) Toxicity & complication management and prediction. **Bodo LIPPITZ (Germany)**
- 10:00 ■ Coffee Break.
- 10:30 ■ II - Fistulas.
- 10:30 ■ a) Definition indications of the different approaches' outcome definition of cure. **Giorgio SPATOLA (Italy)**
- 10:50 ■ b) Targeting, technic of radiosurgery and outcome (safety efficacy). **Selcuk PEKER (Turkey)**
- 11:10 ■ c) Spinal AVM and FAV indications and results of radiosurgery. **Roberto MARTINEZ-ALVAREZ (Spain)**
- 11:30 ■ III - Cavernomas.
- 11:30 ■ a) Epidemiology, pathology, clinical presentation, natural history and bleeding risk. **Mohamed Yassine BELTAIFA (France)**
- 11:55 ■ b) Role of Radiosurgery and alternatives, efficacy and complication of SRS. **Roberto MARTINEZ-ALVAREZ (Spain)**
- 12:20 ■ Discussion & Closure.
- 12:30 ■ Free Lunch time.
- 13:00 ■ Manufacturer/demo sessions: How I do with the Gamma Plan.
- 14:00 ■ Manufacturer/demo sessions: How I do with Element. **Selcuk PEKER (Turkey)**

Salle 120

14:00

C12

14:00 - 18:00

**WORKSHOP**  
**Recent advances in Peripheral Nerve Stimulation (PNS) for intractable pain**Moderators: **Denys FONTAINE (France)**, **Konstantin V. SLAVIN (USA)**

- 14:00 ■ Mechanisms of action of PNS. **Anne BALOSSIER (France)**
- 14:30 ■ Facial PNS for facial pain. **Konstantin V. SLAVIN (USA)**
- 15:00 ■ Occipital Nerve Stimulation for non-primary headache and cervical pain. **Sylvie RAOUL (France)**
- 16:00 ■ Brachial plexus roots PNS for upper limb pain. **Denys FONTAINE (France)**
- 16:30 ■ Peripheral Nerve Field Stimulation for chronic low back pain. **Philippe RIGOARD (France)**
- 17:00 ■ Dorsal Root Ganglion stimulation. **Andrei BRINZEU (France)**
- 17:30 ■ Discussion.

Espace  
Vieux-Port

## Wednesday 08 September

15:30

COFFEE BREAK

18:00

A14

18:00 - 19:00

## WELCOME LECTURES

Moderators: **Antonio GONÇALVES FERREIRA** (Portugal), **Joachim K. KRAUSS** (Germany), **Paul KRACK** (Switzerland), **Jean REGIS** (France)

Grand Amphithéâtre

18:00 ■ The DNA of the ESSFN. **Marwan HARIZ** (Sweden)

18:15 ■ Honorary session.

*Alim Louis Benabid, Bergman Hagai, Pierre Pollak*

18:25 ■ The stunning undersea world of Marseille: portrait of two iconic dwellers in a challenging environment. **Jean-Georges HARMELIN** (France)

18:30

WELCOME RECEPTION - EXHIBITION AREA

## Thursday 09 September

08:30

A21

08:30 - 10:00

## PLENARY SESSION 1 - OPENING CEREMONY &amp; SPECIAL LECTURES

Moderators: **Patric BLOMSTEDT** (Sweden), **Antonio GONÇALVES FERREIRA** (Portugal), **Jean REGIS** (France)

Grand Amphithéâtre

08:30 ■ Opening Lecture. **Antonio GONÇALVES FERREIRA** (Portugal)

08:45 ■ Stereotactic Navigation: 4 centuries BC. **Jean REGIS** (France)

09:15 ■ Lesion versus stimulation for OCD & depression. **Ludvic ZRINZO** (United Kingdom), **Veerie VISSER-VANDEWALLE** (Germany)

10:00

COFFEE BREAK &amp; VISIT OF POSTERS AND EXHIBITION

10:30

A22

10:30 - 12:00

## PLENARY SESSION 2 - MOVEMENT DISORDERS

Moderators: **Jorge GURIDI** (Spain), **Andres LOZANO** (Canada), **Tatiana WITJAS** (France)

Grand Amphithéâtre

10:30 ■ PPN stimulation for gait disorders in PD. **Stephan CHABARDÈS** (France)

10:50 ■ Spinal cord stimulation for gait disorders in PD. **Grégoire COURTINE** (Switzerland)

11:10 ■ STN DBS a new treatment of impulse control disorders in PD? **Paul KRACK** (Switzerland)

11:30 ■ Rational past & future of PTT in Parkinson disease. **Jorge GURIDI** (Spain)

11:50 ■ Discussion.

12:00

INDUSTRIAL LUNCH WORKSHOPS

13:30

A24

13:30 - 15:00

## PLENARY SESSION 3 - LESIONING

Moderators: **Kostiantyn KOSTIUK** (Ukraine), **Ido STRAUSS** (Israel), **Ludvic ZRINZO** (United Kingdom)

Grand Amphithéâtre

13:30 ■ HIFU for Tremor. **Jordi RUMIA** (Spain)

13:50 ■ Is there a future role of LITE in Movement Disorders. **Michael SCHULDER** (USA)

14:10 ■ HIFU for OCD. **Jin Woo CHANG** (Korea, Republic of)

14:30 ■ P&C FUS versus DBS in essential tremor (Vim) & PD (STN) - Pros and cons. **Ron ALTERMAN** (USA), **Rees COSGROVE** (USA)

15:00

COFFEE BREAK &amp; VISIT OF POSTERS AND EXHIBITION

**PARALLEL SESSION 1**  
**Restorative Surgery**Moderators: **Jocelyne BLOCH (Switzerland), Stéphane PALFI (France)**Grand  
Amphithéâtre15:30 ■ Restorative transplantation and viral vectors. **Nicole DEGLON (Switzerland)**15:45 ■ Restorative transplantation and viral vectors. **Stéphane PALFI (France)**16:00 ■ #26251 - Efficient representation of hand biomechanics for upper limb neuroprostheses. **Keogh CONOR (Oxford, United Kingdom), Fitzgerald JAMES****PARALLEL SESSION 2**  
**Movement Disorders**Moderators: **Juan Antonio BARCIA (Spain), Alexandre EUSEBIO (France), Niels Anthony VAN DER GAAG (The Netherlands)**15:30 ■ #23357 - Long-term evaluation of deep brain stimulation for treatment of Parkinson's disease using a multiple-source, constant-current rechargeable system: 4-year follow-up of a prospective, double-blind RCT. **Philip STARR (San Francisco, USA), Roshini JAIN, Lilly CHEN, Alexander TRÖSTER, Lauren SCHROCK, Paul HOUSE, Monique GIROUX, Adam HEBB, Sierra FARRIS, Donald WHITING, Timothy LEICHLITER, Jill OSTREM, Marta SAN LUCIANO, Nicholas GALIFIANAKIS, Leo VERHAGEN METMAN, Sepehr SANI, Jessica KARL, Mustafa SIDDIQUI, Stephen TATTER, Ihtsham UL HAQ, Andre MACHADO, Michal GOSTKOWSKI, Michele TAGLIATI, Adam MAMELAK, Michael OKUN, Kelly FOOTE, Guillermo MOGUEL-COBOS, Francisco PONCE, Rajesh PAHWA, Jules NAZZARRO, Cathrin BUETEFISCH, Robert GROSS, Corneliu LUCA, Jonathan JAGID, Gonzalo REVUELTA, Istvan TAKACS, Michael POURFAR, Alon MOGILNER, Andrew DUKER, George MANDYBUR, Joshua ROSENOW, Scott COOPER, Michael PARK, Suketu KHANDHAR, Mark SEDRAK, Fenna PHIBBS, Julie PILITSIS, Ryan UITTI, Jerrold VITEK**15:40 ■ #23378 - Stereotactic ventral-intermediate nucleus for essential tremor tremor normalizes aberrant dynamic functional connectivity of extrastriate visual system: a resting-state functional MRI study. **Constantin TULEASCA (Lausanne, Switzerland), Thomas BOLTON, Jean RÉGIS, Elena NAJDENOVSKA, Tatiana WITJAS, Nadine GIRARD, Mohamed FAOUZI, Jean-Philippe THIRAN, Meritxell BACH CUADRA, Marc LEVIVIER, Dimitri VAN DE VILLE**15:50 ■ #23786 - Asleep deep brain stimulation for essential tremor using a machine-learning approach for targeting: preliminary results of a phase-2 clinical trial (OPTI-VIM). **Julien ENGELHARDT, Emile SIMON, Dominique GUEHL, Stephane THOBOIS, Nathalie DAMON-PERRIERE, Teodor DANAILA, Louis NADAL, Pierre BRIAU, Olivier BRANCHARD, Nicolas AUZOU, Marie BONNET, Wassilios MEISSNER, Antoine BENARD, Pierre BURBAUD, Polo GUSTAVO, Patrick MERTENS, Emmanuel CUNY (Bordeaux)**16:00 ■ #23788 - Study of MRgFUS thalamotomy lesions in essential tremor and Parkinson disease in a large cohort of patients. **Olga Maria PARRAS (London, United Kingdom), Jorge GURIDI LEGARRA, Mari Cruz RODRÍGUEZ OROZ, Miguel FERNÁNDEZ MARTÍNEZ, Arantza GOROSPE OSINALDE, Iciar AVILÉS OLMOS, Laín Hermes GONZÁLEZ QUARANTE**16:10 ■ #23801 - Structure-Function Relationship of the Posterior Subthalamic Area with Directional Deep Brain Stimulation for Essential Tremor. **Andreas NOWACKI (Bern, Switzerland), Jean-Philippe LÉVY, Anh Khoa NGUYEN, Lennard LACHENMAYER, Ines DEBOVE, Gerd TINKHAUSER, Katrin PETERMANN, Joan MICHELIS, Michael SCHÜPBACH, Claudio POLLO**16:20 ■ #23885 - Long-term local field potential-guided directional deep brain stimulation in Parkinson's disease. **Carla FERNÁNDEZ GARCÍA (Madrid, Spain), Victor GOMEZ MAYORDOMO, Mariana H.G. MONJE, Maria Jose CATALAN, Maria Mercedes GONZÁLEZ HIDALGO, Jordi MATIAS-GUIU GUIA, Fernando ALONSO FRECH**16:30 ■ #23910 - Effects of deep brain stimulation on depressive symptoms and cerebral glucose metabolism in parkinson's disease. **Xiaoxiao ZHANG (Shanghai, China), Bomin SUN, Chencheng ZHANG**16:40 ■ #23914 - MRgFUS thalamotomy sensory side effects follow the thalamic structural and functional homonculus. **Michelle PAFF (Orange, CA, Canada), Alexandre BOUTET, Jurgen GERMANN, Gavin ELIAS, Clement CHOW, Aaron LOH, Walter KUCHARCZYK, Alfonso FASANO, Michael SCHWARTZ, Andres LOZANO**16:50 ■ #23927 - Surgery-related 30-day morbidity of functional stereotactic neurosurgery in a large cohort of 600 operations. **Joachim RUNGE (Hannover, Germany), Assel SARYYEVA, Marc WOLF, Christian BLAHAK, Christoph SCHRADER, Holger H. CAPELLE, Hansjörg BÄZNER, Mahmoud ABDALLAT, Joachim K. KRAUSS**17:00 ■ #23933 - Globus pallidus stimulation as treatment for camptocormia in Parkinson's disease. **Yijie LAI, Yunhai SONG (Shanghai, China), Daoqin SU, Linbin WANG, Chencheng ZHANG, Jorik NONNEKES, Bastiaan BLOEM, Dianyou LI**17:10 ■ #23943 - Subthalamic nucleus and EEG signatures underlying leg force modulation in patients with Parkinson's disease. **Yohann THENAISIE, Andrea GALVEZ, Kyuhwa LEE, Charlotte MOERMAN, Mayte CASTRO-JIMENEZ, Elvira PIRONDINI, Grégoire COURTINE, Jocelyne BLOCH, Eduardo MARTIN MORAUD (Lausanne, Switzerland)**17:20 ■ #23944 - Subthalamic nucleus activity patterns correlate with modulations in leg muscle synergies during locomotion in Parkinson's patients. **Yohann THENAISIE, Charlotte MOERMAN, Kyuhwa LEE, Flavio RASCHELLA, Andrea GALVEZ, Mayte CASTRO-JIMENEZ, Elvira PIRONDINI, Grégoire COURTINE, Jocelyne BLOCH, Eduardo MARTIN MORAUD (Lausanne, Switzerland)**17:30 ■ #23978 - Bilateral Subthalamic Nucleus Theta Frequency Stimulation Improves Episodic Verbal Fluency in Patients with Parkinson's Disease: A Double-Blinded Randomized Crossover Trial. **Jordan LAM, Justin LEE, Brian LEE, Darrin LEE (Los Angeles, USA)**

17:40 ■ #23990 - Does dystonia severity impact deep brain stimulation surgery and related complications?

Salle Major

Thursday 09 September

[Joana MONTEIRO](#) (Lisboa, Portugal), [Emilie CHAN SENG](#), [Gaëtan POULEN](#), [Philippe COUBES](#), [Laura CIF](#)

17:50 ■ #26026 - European Multicentre Probabilistic Stimulation Map for Essential Tremor. [Andreas NOWACKI](#) (Bern, Switzerland), [Sabry BARLATEY](#), [Bassam AL-FATLY](#), [Till DEMBEK](#), [Maarten BOT](#), [Alexander GREEN](#), [Alba SEGURA-AMIL](#), [Anh Khoa NGUYEN](#), [Lennard LACHENMAYER](#), [Ines DEBOVE](#), [Verle VISSER-VANDEWALLE](#), [Andreas HORN](#), [Richaard SCHURMAN](#), [Michael BARBE](#), [Tipu AZIZ](#), [Andrea KÜHN](#), [Claudio POLLO](#)

18:10 ■ #24013 - A randomized controlled trial of awake versus asleep microelectrode guided frame-based deep brain stimulation for Parkinson's disease. [Roze Marie HOLEWIJN](#) (Amsterdam, The Netherlands), [Dagmar VERBAAN](#), [Pepijn MUNCKHOF](#), [VAN DEN](#), [Maarten BOT](#), [Gert GEURTSSEN](#), [Rob BIE](#), [DE](#), [Rick SCHUURMAN](#)

18:20 ■ #24082 - Probabilistic tractography aids lead placement in DBS for essential tremor. [Loránd ERŐSS](#) (Solymar, Hungary), [László HALÁSZ](#)

18:30 ■ #24083 - Pedunculopontine Nucleus Deep Brain Stimulation for Parkinsonian disorders: A Case Series. [Viswas DAYAL](#), [Ali RAJABIAN](#) (London Queen Square, United Kingdom), [Marjan JAHANSHAHI](#), [Iciar AVILES-OLMOS](#), [Dorothy COWIE](#), [Amy PETERS](#), [Brian DAY](#), [Jonathan HYAM](#), [Harith AKRAM](#), [Patricia LIMOUSIN](#), [Marwan HARIZ](#), [Ludvic ZRINZO](#), [Thomas FOLTYNIE](#)

18:40 ■ #25588 - Stereotactic Targeting in Europe: The European Society of Stereotactic and Functional Neurosurgery Survey. [Emmanuel CUNY](#) (Bordeaux), [Jean REGIS](#)

18:50 ■ #23993 - Paediatric Deep Brain Stimulation: the challenge of secondary dystonia. [Vincent D'HARDEMARE](#) (Paris), [Nathalie DORISON](#), [Diane DOUMMAR](#), [Marie HULLY](#), [Florence RENALDO](#), [Domitille GRAS](#), [Emmanuel ROZE](#), [Cecilia ALTUZZARA](#), [Aude CHAROLLAIS](#), [Véronique DARMENCY](#), [Alice GIGNOUX](#), [Georg DORFMULLER](#), [Bernard PIDOUX](#), [Julie BONHEUR](#), [Laurent GOETZ](#)

C25

15:30 - 17:00

### PARALLEL SESSION 3 Radiosurgery - Other

Moderators: [Roman LISCAK](#) (Czech Republic), [Roberto MARTINEZ-ALVAREZ](#) (Spain), [Piero PICOZZI](#) (Italy)

15:30 ■ #23675 - Long-term Cognitive Outcome after Radiosurgery in Epileptic Hypothalamic Hamartomas. [Hussein HAMD](#) (Marseille), [Faisal ALBADER](#), [Virginie LAGUITTON](#), [Agnes TREBUCHON](#), [Fabrice BARTOLOMEI](#), [Jean REGIS](#)

15:40 ■ #23934 - Gamma Knife Radiosurgery in the treatment of Glomus jugulare tumours - the Vienna series. [Brigitte GATTERBAUER](#) (Vienna, Austria), [Josa M. FRISCHER](#)

15:50 ■ #23969 - Safety of Gamma Knife ICON Hypo-fractionated treatment for benign peri-optic lesions: preliminary results from a single centre. [Giorgio SPATOLA](#) (Brescia, Italy), [Lodoviga GIUDICE](#), [Karol MIGLIORATI](#), [Bassetti CHIARA](#), [Cesare GIORGI](#), [Oscar VIVALDI](#), [Mario BIGNARDI](#), [Alberto Bernardo FRANZIN](#)

16:00 ■ #24048 - Comparison of dorsal root entry zone and trigeminal nerve fibers adjacent to trigeminal ganglion in targeting of gamma knife radiosurgery for trigeminal neuralgia. [Mesut Emre YAMAN](#) (Ankara, Turkey), [Burak KARAASLAN](#), [Munibe Busra ERDEM](#), [Gökberk EROL](#), [Beste GÜLSUNA](#), [Şükrü AYKOL](#)

16:10 ■ #26276 - Long-term hearing outcome after radiosurgery for vestibular schwannomas: a systematic review and meta-analysis. [Anne BALOSSIER](#) (Marseille), [Constantin TULEASCA](#), [Christine DELSANTI](#), [Lucas TROUDE](#), [Jean-Marc THOMASSIN](#), [Pierre-Hugues ROCHE](#), [Jean RÉGIS](#)

16:30 ■ #23795 - Opening of blood brain barrier (BBB) in the hippocampus and entorhinal cortex in early Alzheimer's disease with focused ultrasound (FUS). [Ali REZAI](#) (Morgantown, USA), [Manish RANJAN](#), [Pierre-Francois D'HAESE](#), [Mark HAUT](#), [Jeffrey CARPENTER](#), [Umer NAJIB](#), [Rashi MEHTA](#), [Alexander SONG](#), [Daniel CLAASSEN](#), [J. Levi CHAZEN](#), [Michael LIN](#), [Zion ZIBLY](#), [Gary MARANO](#), [Mor DAYAN](#), [Nathanial KELM](#), [Sally HODDER](#), [Michael KAPLITT](#)

16:40 ■ #26280 - Deep Brain Stimulation in Disorders of Consciousness: A 10-year institutional experience. [Darko CHUDY](#) (Zagreb, Croatia), [Vedran DELETIS](#), [Domagoj DLAKA](#), [Dominik ROMIC](#), [Fadi ALMAHARIQ](#), [Nina PREDRIJEVIC](#), [Darko ORESKOVIC](#), [Andelo KASTELANCIC](#), [Petar MARCINKOVIC](#), [Marina RAGUZ](#)

16:50 ■ #23854 - Awakening the brain with DBS of the intralaminar thalamus after severe brain injury. [Hisse ARNTS](#) (Amsterdam, The Netherlands), [Willemijn VAN ERP](#), [Berno OVERBEEK](#), [Rick SCHUURMAN](#), [Pepijn VAN DEN MUNCKHOF](#)

16:55 ■ #26301 - Entraining human wakefulness: selective, closed-loop stimulation of brainstem arousal circuits. [Alceste DELI](#), [Alceste DELI](#) (Oxford, United Kingdom), [Shenghong HE](#), [Yongzhi HUANG](#), [Sean MARTIN](#), [Tipu AZIZ](#), [Timothy DENISON](#), [Alexander GREEN](#)

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D25

15:30 - 17:00

### PARALLEL SESSION 4 Epilepsy

Moderators: [Claire HAEGELEN](#) (France), [Dirk VAN ROOST](#) (Belgium)

15:30 ■ #23939 - Network substrates of centromedian DBS in generalized pharmacoresistant epilepsy. [Cristina TORRES](#) (Madrid, Spain), [Gabriel GONZALEZ-ESCAMILLA](#), [Dumitru CIOLAC](#), [Marta NAVAS](#), [Paloma PULIDO](#), [Jesus PASTOR](#), [Vega-Zelaya LORENA](#), [Rafael G. SOLA](#), [Sergiu GROPPA](#)

15:40 ■ #25980 - Anterior Nucleus of the Thalamus DBS versus best medical therapy including VNS for pharmaco-resistant epilepsy: results of the FRANCE STUDY, a randomized, open label trial. [Stephan CHABARDÈS](#) (GRENOBLE), [Haegelen CLAIRE](#), [Fabrice BARTOLOMEI](#), [Sylvain RHEIMS](#), [Emmanuel CUNY](#), [Sophie COLNAT COLBOIS](#), [Louis MAILLARD](#), [Philippe KAHANE](#), [Stephane CLEMENCEAU](#), [Bertrand DEVAUX](#), [Marc Guenet GUENOT](#), [Guillaume PENCHET](#), [Denys FONTAINE](#), [Anca ANCA](#), [Lorella MINOTTI](#), [Study Group FRANCE](#), [Sandra DAVID-TCHOUDA](#), [Jean REGIS](#)



Thursday 09 September

15:50 ■ #26112 - Surgery for multifocal epilepsy. [Kostiantyn KOSTIUK](#) (KYIV, Ukraine), [Varelii CHEBURAKHIN](#), [Maxim SHEVELOV](#), [Yuri MEDVEDEV](#), [Andriy POPOV](#), [Sergii DICHKO](#), [Oleksiy KANAYKIN](#), [Vladyslav BUNYAKIN](#), [David TEVZADZE](#)

16:00 ■ #26153 - Towards refined targeting the anterior nucleus of thalamus in DBS for epilepsy. [Milan MAJTANIK](#) (Düsseldorf, Germany), [Juergen MAI](#), [Frans GIELEN](#), [Kai LEHTIMÄKI](#), [Volker COENEN](#), [António José GONÇALVES FERREIRA](#), [Antonio GIL-NAGEL](#), [Jukka PELTOLA](#), [Philippe RYVLIN](#), [Abdallah ABOUIHIA](#), [Thomas BRIONNE](#), [Paul BOON](#)

Salle 120

16:10 ■ #26042 - Cost-Effectiveness Analysis of Responsive Neurostimulation for Drug-Resistant Focal Onset Epilepsy. [Brett YOUNGERMAN](#), [Timothy DYSTER](#), [Shraddha SRINIVASAN](#), [Casey HALPERN](#), [Guy MCKHANN](#), [Sameer SHETH](#) (Houston, USA)

16:15 ■ #26046 - A role for modulation of the mamillothalamic tract in seizure control? [Yasin TEMEL](#) (Maastricht, The Netherlands)

16:20 ■ #26129 - Thalamic deep brain stimulation in refractory epilepsy. Surgical practices and outcomes. [Kai LEHTIMÄKI](#) (Tampere, Finland), [Yasin TEMEL](#), [António José GONÇALVES FERREIRA](#), [Volker COENEN](#), [Juergen MAI](#), [Milan MAJTANIK](#), [Antonio GIL-NAGEL](#), [Jukka PELTOLA](#), [Philippe RYVLIN](#), [Abdallah ABOUIHIA](#), [Thomas BRIONNE](#), [Frans GIELEN](#), [Paul BOON](#)

16:25 ■ #27684 - Deep brain stimulation of anterior nucleus of thalamus for intractable epilepsy: analysis of contacts position. [Hussein HAMDJ](#) (Marseille), [Milan MAJTANIK](#), [Claire HAEGELEN](#), [Juergen MAI](#), [Stephan CHABARDES](#), [Jean REGIS](#)

16:30 ■ #26730 - A tractography study after bilateral anterior thalamic stimulation in drug-resistant epilepsy. [Claire HAEGELEN](#) (Lyon), [Mathilde GAUDIAN](#), [Alfonso ESTUDILLO](#), [John BAXTER](#), [Elise BANNIER](#), [Stephan CHABARDES](#), [Anca NICA](#), [Pierre JANNIN](#)

16:40 ■ #26195 - Developing prediction models of SEEG electrode implantation accuracy in epileptic patients. [Cyan KORT](#) (Maastricht, The Netherlands), [Janvi KAKADIA](#), [Pieter KUBBEN](#), [Olaf SCHIJNS](#), [Louis WAGNER](#), [Lars VAN DER LOO](#), [Govert HOOGLAND](#), [Jim DINGS](#), [Kim RIJKERS](#), [Sander VAN KUIJK](#)

16:30

A26

16:30 - 19:00

## PARALLEL SESSION 5 Pain Surgery

Moderators: [Konstantin V. SLAVIN](#) (USA), [Pawel SOKAL](#) (Poland)

16:30 ■ Limbic or sensory discriminative DBS in Neuropathic pain. [Joachim K. KRAUSS](#) (Germany)

16:50 ■ Renaissance of Peripheral Nerve Stimulation in Treatment of Pain" with possible subheading "Does it really work?" [Konstantin V. SLAVIN](#) (USA)

17:10 ■ Dorsal root ganglion stimulation. [Dirk DE RIDDER](#) (New Zealand)

17:30 ■ DBS for Pain. [Tipu AZIZ](#) (United Kingdom)

17:50 ■ Mesencephalotomy: anatomo-clinical correlations based on a brainstem normalized coordinate system. [Laurent GOETZ](#) (France)

18:00 ■ #23493 - Effectiveness of Stereotactic Thalamotomy in Patients with Intractable Pain. [Jaromir HANUSKA](#) (Prague, Czech Republic), [Dusan URGOSIK](#), [Roman LISCAK](#)

18:10 ■ #23800 - DBS for chronic cluster headache: a clinical and image-based meta-analysis of individual patient data. [Andreas NOWACKI](#) (Bern, Switzerland), [Martin SCHÖBER](#), [Lydia NADER](#), [Assel SARYYEVA](#), [Anh Khoa NGUYEN](#), [Alexander GREEN](#), [Claudio POLLO](#), [Joachim KRAUSS](#), [Denys FONTAINE](#)

18:20 ■ #23896 - Molecular inflammatory phenotyping in neuropathic pain patients under unilateral L4-dorsal root ganglion stimulation. [Thomas KINFE](#) (Erlangen, Germany), [Michael BUCHFELDER](#), [Thomas YEARWOOD](#)

18:30 ■ #24080 - Gasserian ganglion stimulation in neuropathic facial pain. [László HALÁSZ](#) (Budapest, Hungary), [Loránd ERŐSS](#)

18:40 ■ Discussion.

Grand  
Amphithéâtre

17:00

C26

17:00 - 19:15

## PARALLEL SESSION 7 Psychiatry

Moderators: [Patric BLOMSTEDT](#) (Sweden), [Jean FARISSE](#) (France), [Kuan Hua KHO](#) (The Netherlands), [Mircea POLOSAN](#) (France)

17:00 ■ #23609 - Neuropsychological and neuropsychiatric outcome after anterior capsulotomy (including the repeated surgery) for obsessive-compulsive disorder. [Dusan URGOSIK](#) (Prague, Czech Republic), [Lenka KRAMSKA](#), [Jaroslava SKOPOVA](#), [Lucia HRESKOVA](#), [Roman LISCAK](#)

17:10 ■ #23937 - What do we learn from the prefrontal leucotomy undergone for psychiatric disorders in times past? - Study with the combination of tractographic and scalp EEG functional connectivity analysis -. [Katsushige WATANABE](#) (Tokyo, Japan), [Shunsuke IKEDA](#), [Yasushi OKAMURA](#), [Makoto TANIGUCHI](#)

17:20 ■ #23955 - Structural MRI analyses in OCD: a review of the literature to set out possible predictive factors in patients candidate to anterior capsulotomy. [Giorgio SPATOLA](#) (Brescia, Italy), [Raphaelle RICHIERI](#), [Viktor JIRSA](#), [Costantin TULEASCA](#), [Yassine BELTAIFA](#), [Nadine GIRARD](#), [Jean Marie REGIS](#)

17:30 ■ #26011 - Long-term results of deep brain stimulation for schizophrenia: a pilot study. [Juan Ángel AIBAR DURÁN](#) (BARCELONA, Spain), [Alexandra ROLDAN BEJARANO](#), [Iluminada CORRIPIO COLLADO](#), [Ignacio ARACIL BOLANOS](#),

Thursday 09 September

Rodrigo RODRIGUEZ RODRIGUEZ

17:40 ■ #26041 - Dual-target deep brain stimulation for depression informed by intracranial stereo-EEG. [Sameer SHETH](#) (Houston, USA), [Kelly BIJANKI](#), [Brian METZGER](#), [Anusha ALLAWALA](#), [Victoria PIRTLE](#), [Joshua ADKINSON](#), [John MYERS](#), [Raissa MATHURA](#), [Denise OSWALT](#), [Evangelia TSOLAKI](#), [Jiyang XIAO](#), [Angela NOECKER](#), [Adriana STRUTT](#), [Jeffrey COHN](#), [Cameron MCINTYRE](#), [Sanjay MATHEW](#), [David BORTON](#), [Wayne GOODMAN](#), [Nader POURATIAN](#)

17:50 ■ #26057 - Targeting deep brain stimulation in obsessive-compulsive disorder: lessons learned from 84 consecutive cases. [Pepijn VAN DEN MUNCKHOF](#) (Amsterdam, The Netherlands), [Maarten BOT](#), [Luka LIEBRAND](#), [Pelle DE KONING](#), [Nienke VULINK](#), [Martijn FIGEE](#), [Guido VAN WINGEN](#), [Damiaan DENYS](#), [Rick SCHUURMAN](#)

18:00 ■ #26194 - Globus pallidus internus deep brain stimulation can provide durable benefits in severe Gilles de la Tourette syndrome. [Olga PARRAS GRANERO](#) (London, United Kingdom), [Nirosen VIJJIARATNAM](#), [Marjan JAHANSHAHI](#), [Joseph CANDELARIO](#), [Catherine MILABO](#), [Harith AKRAM](#), [Jonathan HYAM](#), [Patricia LIMOUSIN](#), [Marwan HARIZ](#), [Eileen JOYCE](#), [Ludvic ZRINZO](#), [Tom FOLTYNIE](#)

18:10 ■ #26290 - Preliminary Safety and Feasibility Outcomes of Nucleus Accumbens Deep Brain Stimulation (DBS) Clinical Trial for Opioid Use Disorder. [Ali REZAI](#) (Morgantown, USA), [Manish RANJAN](#), [Pierre-Francois D'HAESE](#), [Mark HAUT](#), [Wanhong ZHENG](#), [Laura LANDER](#), [Nicholas BRANDMEIR](#), [Victor FINOMORE](#), [Sally HODDER](#), [Berry JAMES](#), [James MAHONEY](#)

18:20 ■ #26306 - Why subthalamic DBS should not be ignored for refractory OCD: evidence from quality of life study. [Mircea POLOSAN](#) (Grenoble), [Pauline MAZE](#), [Brigitte PIALLAT](#), [Julien BASTIN](#), [Eric SEIGNEURET](#), [Alexandre KRAINIK](#), [Paul KRACK](#), [Stephan CHABARDES](#)

18:30 ■ #26146 - Cellular anatomy of the Sano triangle and therapeutic hypothesis for psychosurgery. [Marie Des Neiges SANTIN](#) (PARIS), [Marion PLAZE](#), [Chantal FRANCOIS](#), [Christophe DESTRIEUX](#), [Eric BARDINET](#), [Marwan HARIZ](#), [Raphaël GAILLARD](#), [Carine KARACHI](#)

18:35 ■ #26015 - Cocaine-induced changes in dopamine levels in nucleus accumbens as a potential biomarker for drug addiction neuromodulation. [Jason YUEN](#) (Rochester, MN, USA), [Abhinav GOYAL](#), [Aaron RUSHEEN](#), [Abbas KOUZANI](#), [Michael BERK](#), [Jee Hyun KIM](#), [Susannah TYE](#), [Charles BLAHA](#), [Dong-Pyo JANG](#), [Kevin BENNET](#), [Hojin SHIN](#), [Yoonbae OH](#), [Kendall LEE](#)

18:40 ■ #23958 - Deep brain stimulation (DBS) of the median forebrain bundle in a rodent model of depression: Interaction between depressive-like phenotypes and estrogen in female rats. [Anna TADROS](#) (Freiburg, Germany), [Wilf GARDNER](#), [Yixin TONG](#), [Tsvetan SERCHOV](#), [Volker Arnd COENEN](#), [Máté DÖBRÖSSY](#)

18:45 ■ #25945 - Deep Brain Stimulation for psychiatric disorders: long-term surgical management. [Martin JAKOBS](#) (Heidelberg, Germany), [David Hernán AGUIRRE-PADILLA](#), [Peter GIACOBBE](#), [Andreas UNTERBERG](#), [Andres LOZANO](#)

18:50 ■ #23953 - Investigation of sleep, behavioural and physiological deficits in the FSL model of depression and the related effects of medial forebrain bundle deep-brain stimulation. [Wilf GARDNER](#) (Strasbourg), [Laura DURIEUX](#), [Anna TADROS](#), [Fanny FUCHS](#), [Tsvetan SERCHOV](#), [Chantal MATHIS](#), [Volker Arnd COENEN](#), [Máté DÖBRÖSSY](#), [Lucas LECOURTIER](#)

18:55 ■ #23912 - Longterm deep brain stimulation in treatment-resistant obsessive-compulsive disorder: outcome and quality of life at 4- 8 years follow-up. [Assel SARYYEVA](#), [Lotta WINTER](#), [Kerstin SCHWABE](#), [Hans.e HEISSLER](#), [Joachim RUNGE](#) (Hannover, Germany), [Mesbach ALAM](#), [Ivo-Aleksander HEITLAND](#), [Kai KAHL](#), [Joachim K. KRAUSS](#)

19:00 ■ #23954 - Medial forebrain bundle DBS differentially modulates dopamine release in the nucleus accumbens in a rodent model of depression. [Danesh Vajari ASHOURI](#) (Freiburg, Germany), [Chockalingam RAMANATHAN](#), [Yixin TONG](#), [Stieglitz THOMAS](#), [Volker Arnd COENEN](#), [Máté DÖBRÖSSY](#)

19:05 ■ #25925 - SURGERY AND RADIOSURGERY IN AUTISM: RETROSPECTIVE STUDY IN 10 PATIENTS. [Cristina TORRES](#) (Madrid, Spain), [Nuria MARTINEZ](#), [Monica LARA](#), [Marcos RÍOS-LAGO](#)

D26

17:00 - 18:05

## PARALLEL SESSION 8 Epilepsy

Moderators: [Sophie COLNAT-COULBOIS](#) (France), [Martin JAKOBS](#) (Germany), [Krassimir MINKIN](#) (Bulgaria)

17:00 ■ #23516 - sEEG mapping of basal temporal language area predicts postoperative language outcome. [Chifaou ABDALLAH](#), [Helene BRISSART](#), [Ludovic PIERSON](#), [Olivier ARON](#), [Natacha FORTHOFFER](#), [Jean Pierre VIGNAL](#), [Louise TYVAERT](#), [Jacques JONAS](#), [Louis MAILLARD](#), [Sophie COLNAT-COULBOIS](#) (Nancy)

17:10 ■ #23666 - Distant Cortical Abnormalities in Epileptic Hypothalamic Hamartoma Patients. [Hussein HAMDÍ ABOUELGHEIT](#) (Marseille), [Guillaume AUZIAS](#), [Olivier COULON](#), [Nadine GIRARD](#), [Fabrice BARTOLOMEI](#), [Jean REGIS](#)

17:20 ■ #23962 - Long term follow-up in VNS for resistant epilepsy. [Elena FRERI](#), [Marina CASAZZA](#), [Guia MAROTTA](#), [Edoardo PORTO](#) (Milan, Italy), [Giovanni Umberto TRINGALI](#), [Elisa VISANI](#)

17:30 ■ #23917 - Awake epilepsy surgery. [Krasimir MINKIN](#) (Sofia, Bulgaria), [Kaloyan GABROVSKI](#), [Petar KARAZAPRYANOV](#), [Petya DIMOVA](#), [Vasil KARAKOSTOV](#)

17:40 ■ #23972 - Single-center experience with frameless personalized stereotaxy for SEEG. [Andrei BARBORICA](#), [Jean CIUREA](#), [Ioana MANDRUTZA](#), [Rasina ALIN](#), [Tatiana CIUREA](#), [Costi PISTOL](#), [Felix BREHAR](#) (Bucharest, Romania)

17:45 ■ #26142 - Reduction of penicillin-induced seizure in a non-human primate mesio-temporal lobe epilepsy model by deep brain cooling. [Napoleon TORRES](#) (GRENOBLE), [Quentin BORNTAGER](#), [Nicolas AUBERT](#), [Fabien SAUTER](#), [Claude CHABROL](#), [David RATEL](#), [Jenny MOLET](#), [Brigitte PIALLAT](#), [Stephan CHABARDES](#)

Es pace  
Vieux-Port

Salle 120

18:05

D27

18:05 - 19:05

## PARALLEL SESSION 10 Flash - Movement disorders

Moderators: **Harith AKRAM (United Kingdom), Carine KARACHI (France), Oystein TVEITEN (Norway)**

**18:05** ■ #23359 - Long-term motor function and quality of life outcomes from a prospective, international DBS registry. **Jan VESPER (DUSSELDORF, Germany), Roshini JAIN, Heleen SCHOLTES, Alex WANG, Michael T. BARBE, Steffen PASCHEN, Jens VOLKMANN, Chong-Sik LEE, Andrea KÜHN, Monika PÖTTER-NERGER, Günther DEUSCHL**

**18:15** ■ #23412 - Directional versus Omnidirectional Deep Brain Stimulation: Results of a Multicenter Prospective Blinded Crossover Study. **Alfons SCHNITZLER, Pablo MIR, Matthew BRODSKY, Leonard VERHAGEN, Sergiu GROPPA, Ramiro ALVAREZ, Andrew EVANS, Marta BLAZQUEZ, Sean NAGEL, Witold LIBIONKA, Julie PILITSIS, Monika POETTER-NERGER, Winona TSE, Leonardo ALMEIDA, Nestor TOMYCZ, Joohi JIMENEZ-SHAHED, Fatima CARRILLO, Christian J HARTMANN, Stefan Jun GROISS, Florence DEFRESNE, Edward KARST, Bin CHEERAN, Jan VESPER (DUSSELDORF, Germany)**

**18:25** ■ #23360 - Real-world clinical outcomes using a novel directional lead from a multicenter registry of deep brain stimulation for Parkinson's disease. **Jan VESPER (DUSSELDORF, Germany), Roshini JAIN, Heleen SCHOLTES, Alex WANG, Michael T. BARBE, Jens VOLKMANN, Steffen PASCHEN, Chong-Sik LEE, Andrea KÜHN, Monika PÖTTER-NERGER, Günther DEUSCHL**

**18:30** ■ #23392 - Directional DBS leads implanted under general anesthesia vs. sedation: Findings from an international prospective study. **Jan VESPER (DUSSELDORF, Germany), Kim BURCHIEL, Matthew BRODSKY, Brian KOPELL, Julie PILITSIS, Nestor TOMYCZ, Leonard VERHAGEN, Girish NAIR, Andrew EVANS, Wolfgang HAMEL, Pablo MIR, Monika POETTER-NERGER, Joohi JIMENEZ-SHAHED, Philipp SLOTTY, Sergiu GROPPA, Sean NAGEL, Florence DEFRESNE, Edward KARST, Bin CHEERAN, Alfons SCHNITZLER**

**18:35** ■ #23544 - Primary Cell IPG survival analysis and modelling in Directional Deep Brain Stimulation. **Philipp SLOTTY, Binith CHEERAN, Phyllis Sarah MCPHILLIPS, Jan VESPER (DUSSELDORF, Germany)**

**18:40** ■ #23634 - A adaptive DBS Algorithm for Personalized Therapy in Parkinson's Disease: ADAPT-PD Trial: a prospective single-blind, randomized crossover, multi-center trial of deep brain stimulation adaptive algorithms in subjects with Parkinson's disease. **Andrea KUHN (Berlin, Germany), Lisa TONDER, Robert RAIKE, Scott STANSLASKI, Kassa LYNCH, Helen BRONTE-STEWART**

**18:45** ■ #23641 - Directional DBS is associated with fewer surgical revisions than traditional DBS: a nationwide real-world study. **Chengyuan WU (Philadelphia, PA, USA, USA), Monika PÖTTER-NERGER, Rahul AGARWAL, Stuart ROSENBERG, Allison CONNOLLY, Binith CHEERAN, Wolfgang HAMEL, Ashwini SHARAN**

**18:50** ■ #23945 - Peak characteristics in the beta band of the human subthalamic nucleus: a case for low and high beta activity. **Jan MEHRKENS (München, Germany), Franz HELL, Thomas KÖGLSPERGER, Bovet AYSE, Scot STANSLASKI, Annika PLATE, Kai BÖTZEL**

**18:55** ■ #26030 - Programming time using a novel visualization tool in a deep brain stimulation registry. **Jason ALDRED (Spokane, USA), Yarema BEZCHLIBNYK, Jonathan CARLSON, Kelly FOOTE, Sopher SANI, Alexander PAPANASTASSIOU, Jonathan JAGID, David WEINTRAUB, Theresa ZESIEWICZ, Michael OKUN, Leo VERHAGEN MEHTMAN, Juan RAMIREZ-CASANEDA, Corneliu LUCA, Ritesh RAMDHANI, Lilly CHEN, Roshini JAIN**

**19:00** ■ #26031 - Real-world deep brain stimulation outcomes using directional DBS systems with multiple independent current control. **Corneliu LUCA (Miami, USA), Theresa ZESIEWICZ, Michael T. BARBE, Jens VOLKMANN, Frederik CLEMENT, Francisco PONCE, Chris VAN DER LINDEN, Cong ZHAO, Mustafa SIDDIQUI, Nestor TOMYCZ, Tino PRELL, Lilly CHEN, Roshini JAIN**

Salle 120

## Friday 10 September

08:30

A31

08:30 - 10:00

## PLENARY SESSION 4 Psychiatry

Moderators: **Raphaëlle RICHIERI (France), Rick SCHUURMAN (The Netherlands), Veerle VISSER-VANDEWALLE (Germany)**

**08:30** ■ Dementia and nucleus basalis of meynert. **Ludvic ZRINZO (United Kingdom)**

**08:50** ■ OCD. **Rick SCHUURMAN (The Netherlands)**

**09:10** ■ #24089 - Surgery for addiction: animal models suggest to target the subthalamic nucleus. **Christelle BAUNEZ (Marseille)**

**09:30** ■ Novelty in Psychiatric Surgery. **Volker COENEN (Germany)**

**09:50** ■ Discussion.

Grand Amphithéâtre

10:00

COFFEE BREAK & VISIT OF POSTERS AND EXHIBITION

10:30

A32

10:30 - 12:00

## PLENARY SESSION 5 Brain Prediction

Moderators: **Linda ACKERMANS (The Netherlands), Lorand EROSS (Hungary), Maxime GUYE (France), Viktor JIRSA (France)**

Grand

- 10:30 ■ Predicting surgery outcome using patient-specific virtual brain models in epilepsy. **Viktor JIRSA** (France)
- 10:50 ■ Augmenting diagnosis, inferring mechanisms, and predicting intervention outcomes in neurodegenerative disease through personalized Virtual Brain Cloud simulations. **Petra RITTER** (Germany)
- 11:10 ■ Diagnosis and prognosis of epilepsy using predictive mathematical models. **John TERRY** (United Kingdom)
- 11:30 ■ Mapping brain response patterns to DBS with fMRI. **Andres LOZANO** (Canada)
- 11:55 ■ Discussion.

## B32

10:30 - 12:00

PARALLEL SESSION 9B  
Movement disordersModerators: **Nicolas REYNS** (France), **Giorgio SPATOLA** (Italy), **Pepijn VAN DEN MUNCKHOF** (The Netherlands)

- 10:30 ■ #23973 - Evaluating and optimizing Dentato-Rubro-Thalamic-Tract Deterministic Tractography in DBS for Essential Tremor. **Maarten BOT** (Amsterdam, The Netherlands), **Fleur ROOTSELAAR**, **Vincent ODEKERKEN**, **Joke DIJK**, **Rob DE BIE**, **Pepijn VAN DEN MUNCKHOF**, **Rick SCHUURMAN**
- 10:40 ■ #23983 - Utilising 7-Tesla Subthalamic Nucleus Connectivity in Deep Brain Stimulation for Parkinson's Disease. **Varvara MATHIOPOULOU**, **Niels RIJKS**, **Matthan CAAN**, **Luka LIEBRAND**, **Rob DE BIE**, **Pepijn VAN DEN MUNCKHOF**, **Richard SCHUURMAN**, **Maarten BOT** (Amsterdam, The Netherlands)
- 10:45 ■ #23989 - Conventional and directional stimulation of subthalamic nucleus in Parkinson's disease. **Alexey TOMSKIY**, **Anna GAMALEYA** (Moscow, Russia), **Svetlana ASRIANTS**, **Valentin POPOV**, **Anna PODDUBSKAYA**, **Sabina OMAROVA**, **Alexey SEDOV**
- 10:50 ■ #23998 - Power demand and battery longevity: 5-year results from a multi-center global registry. **Stephane PALFI** (PARIS), **Joachim K. KRAUSS**, **Peter KONRAD**, **George PLOTKIN**, **Emmanuel CUNY**, **Jean-Philippe AZULAY**, **Thomas WITT**, **Tom THEYS**, **Yesin TEMEL**, **Gayle JOHNSON**, **Kulwant BHATIA**, **Todd WEAVER**
- 10:55 ■ #24003 - Comparison of clinical outcomes and accuracy of electrode placement between robot-assisted and conventional deep brain stimulation of the subthalamic nucleus: a single-center study. **Shams RIBAUT**, **Emile SIMON** (Lyon), **Julien BERTHILLER**, **Gustavo POLO**, **Patrick MERTENS**, **Teodor DANAILA**, **Stéphane THOBOIS**, **Chloe LAURENCIN**
- 11:00 ■ #24020 - Optimization of the stimulation parameters settings of directional leads with a patient-specific imaging software in implanted parkinsonian patients. **Gustavo TOUZET** (LILLE), **Anne Sophie ROLLAND**, **Nicolas CARRIERE**, **Bastien GOUGES**, **Luc DEFEBVRE**, **David DEVOS**, **Caroline MOREAU**, **Nicolas REYNS**
- 11:05 ■ #25903 - Effects of unilateral stimulation in Parkinson's disease: a randomized double-blind crossover trial. **Zhitong ZENG**, **Linbin WANG**, **Weikun SHI**, **Lu XU**, **Zhengyu LIN**, **Xinmeng XU**, **Peng HUANG**, **Yixin PAN**, **Zhonglue CHEN**, **Yun LING**, **Kang REN**, **Bomin SUN**, **Dianyou LI**, **Chengcheng ZHANG** (Shanghai, China)
- 11:10 ■ #26047 - Biphasic anode-first pulses increase the therapeutic window. **Alexandra BOOGERS** (Leuven, Belgium), **Jana PEETERS**, **Tine VAN BOGAERT**, **Wim VANDENBERGHE**, **Bart NUTTIN**, **Myles MC LAUGHLIN**
- 11:15 ■ #26102 - Directional subthalamic deep brain stimulation in Parkinson's disease: Better clinical results with directional stimulation. **Mazen KALLEL** (Grenoble), **Emmanuel DE SCHLICHTING**, **Eric SEIGNEURET**, **Anna CASTRIOTO**, **Valerie FRAIX**, **Elena MORO**, **Stephan CHABARDES**
- 11:20 ■ #26138 - Pedunculopontine and Cuneiform nuclei deep brain stimulation for severe gait and balance disorders in Parkinson's disease: a randomised double-blind clinical trial. **Julie BOURILHON**, **Claire OLIVIER**, **You HANA**, **Antoine COLLOMB-CLERC**, **David GRABLI**, **Hayat BELAID**, **Yannick MULLIE**, **Chantal FRANÇOIS**, **Virginie CZERNECKI**, **Brian LAU**, **Fernando PÉREZ-GARCÍA**, **Eric BARDINET**, **Sara FERNANDEZ-VIDAL**, **Carine KARACHI**, **Marie-Laure WELTER** (Paris)
- 11:25 ■ #26181 - Deep brain stimulation (DBS) of Subthalamic nucleus and Substantia nigra (SN) for the treatment of gait affection in Parkinson's disease. **Marta DEL ÁLAMO DE PEDRO** (Madrid, Spain), **Iziar AVILÉS-OLMOS**, **Lidia CABAÑES**, **Marta VILLADONIGA**, **Ignacio REGIDOR**
- 11:30 ■ #26193 - Unilateral delivery of autologous injury-activated peripheral nerve graft tissue to the substantia nigra in patients with Parkinson's disease. **Jorge QUINTERO** (Lexington, USA), **John SLEVIN**, **Julie GURWELL**, **Zain GUDURU**, **Tritia YAMASAKI**, **Eglé SUKOCKIENE**, **Thomas HINES**, **Greg GERHARDT**, **Craig VAN HORNE**
- 11:35 ■ #26201 - Clinical outcome of magnetic resonance guided focused ultrasound thalamotomy for essential tremor: results at 6 months follow-up. **Alana ARCADI** (Pamplona, Spain), **Iciar AVILES**, **María GOROSPE**, **Lain GONZALEZ-QUARANTE**, **Antonio MARTIN**, **Laura ARMENGOU**, **María Cruz RODRÍGUEZ**, **Jorge GURIDI**
- 11:40 ■ #26288 - MRI-guided Laser Interstitial Thermal Therapy thalamotomy for essential tremor: a proof-of-concept study. **Mickael AUBIGNAT** (Amiens), **Melissa TIR**, **Felix POTTECHER**, **Salem BOUSSIDA**, **Jean-Marc CONSTANS**, **Michel LEFRANC**
- 11:45 ■ #26296 - Ipsilateral effects of unilateral Deep Brain Stimulation for Essential Tremor. **Erik ÖSTERLUND** (Stockholm Sweden, Sweden), **Patric BLOMSTEDT**, **Anders FYTAGORIDIS**
- 11:50 ■ #26304 - Further refinement of the stimulation hotspot in subthalamic deep brain stimulation for parkinson's disease. **Erik BOLIER** (Amsterdam, The Netherlands), **Maarten BOT**, **Pepijn VAN DEN MUNCKHOF**, **Rick SCHUURMAN**

Salle Major

12:00

## EXCOM

12:00 - 13:30

Salle 50

## ESSFN EXECUTIVE COMMITTEE MEETING

13:30

A34

13:30 - 14:30

**PLENARY SESSION 6**  
**Epilepsy Surgery**Moderators: **Hans CLUSMANN (Germany)**, **Michel LEFRANC (France)**, **István VALÁLIK (Hungary)**13:30 ■ Refractory epilepsies: strategies for the surgical management. **Antonio GONÇALVES FERREIRA (Portugal)**14:00 ■ LITT achievement in Epilepsy Surgery. **Robert GROSS (USA)**Grand  
Amphithéâtre

14:30

COFFEE BREAK &amp; VISIT OF POSTERS AND EXHIBITION

15:00

A35

15:00 - 17:00

**PARALLEL SESSION 11**  
**Movement disorders**Moderators: **Alexandre EUSEBIO (France)**, **Miroslav GALANDA (Slovakia)**, **Claudio POLLO (Switzerland)**

15:00 ■ #26104 - Pallido-putaminal connectivity predicts outcomes of deep brain stimulation for cervical dystonia.

**Ashley RAGHU (Oxford, United Kingdom)**, **John ERAIFEJ**, **John STEIN**, **Stephen PAYNE**, **Tipu AZIZ**, **Alex GREEN**15:10 ■ #26119 - Clinical outcome after MRI-connectivity-guided radiofrequency thalamotomy for tremor. **Thomas WIRTH**, **Ali RAJABIAN**, **Viswas DAYAL**, **Abuhusain HAZEM**, **Nirosen VIJARATNAM**, **Dilan ATHAUDA**, **Marwan HARIZ**, **Tom FOLTYNIE**, **Patricia LIMOUSIN**, **Harith AKRAM (London, United Kingdom)**, **Ludvic ZRINZO**15:20 ■ #26126 - The effect of electric field weighting in improvement maps for deep brain stimulation. **Teresa NORDIN (Linköping, Sweden)**, **Dorian VOGEL**, **Erik ÖSTERLUND**, **Johannes JOHANSSON**, **Anders FYTAGORIDIS**, **Simone HEMM**, **Karin WÄRDELL**15:30 ■ #26136 - Prefrontal network recruitment by STN-DBS is associated with freezing of gait after surgery in PD patients. **Gizem TEMIZ (Paris)**, **Angèle VAN HAMME**, **Claire OLIVIER**, **Antoine COLLOMB-CLERC**, **Sara FERNANDEZ-VIDAL**, **Elodie HAINQUE**, **Brian LAU**, **Carine KARACHI**, **Marie-Laure WELTER**15:50 ■ #26298 - Could the individual cortico-subthalamic tractography improve surgical targeting in Parkinson's patients receiving deep brain stimulation? **Marie Des Neiges SANTIN (PARIS)**, **Gizem TEMIZ**, **Sara FERNANDEZ VIDAL**, **Marie-Laure WELTER**, **Elodie HAINQUE**, **Eric BARDINET**, **Brian LAU**, **Carine KARACHI**16:00 ■ #26308 - Structural covariance analysis to probe alterations in cortical thickness induced by essential tremor, and their renormalisation following stereotactic radiosurgical thalamotomy. **Thomas BOLTON (Lausanne, Switzerland)**, **Dimitri VAN DE VILLE**, **Jean RÉGIS**, **Tatiana WITJAS**, **Nadine GIRARD**, **Marc LEVIVIER**, **Constantin TULEASCA**16:10 ■ #23975 - Combining 7-Tesla T2 and 3T FGATIR Sequences for STN Identification. **Niels RIJKS (Amsterdam, The Netherlands)**, **Wouter POTTTERS**, **José BILAL**, **Rob DE BIE**, **Wietske VAN DER ZWAAG**, **Rick SCHUURMAN**, **Pepijn VAN DEN MUNCKHOF**, **Maarten BOT**16:25 ■ #23823 - Turn'em off - to identify stimulation-induced cerebellar syndrome in VIM/DRT-DBS for essential tremor. **Bastian Elmar Alexander SAJONZ (Freiburg, Germany)**, **Ganna BLAZHENETS**, **Marvin Lucas FROMMER**, **Isabelle WALZ**, **Johannes THUROW**, **Christoph MAURER**, **Michel RIJNTJES**, **Philipp Tobias MEYER**, **Volker Arnd COENEN**16:30 ■ #23828 - Impaired movement-related beta band modulation precedes freezing episodes: hypothesis from upper limb freezing for novel STN sensing technology. **Maria-Sophie BREU**, **Marlieke SCHOLTEN**, **Alireza GHARABAGHI**, **Daniel WEIß (Tuebingen, Germany)**16:35 ■ #23903 - The Multi Recharge Trial: A multicenter, open-label, controlled trial on acceptance, convenience, and complications of rechargeable internal pulse generators for deep brain stimulation. **Martin JAKOBS (Heidelberg, Germany)**, **Ann-Kristin HELMERS**, **Philipp SLOTTY**, **Jürgen SCHLAIER**, **Karl KIENING**, **Andreas UNTERBERG**16:40 ■ #23906 - Deep brain stimulation in patients with chronic antithrombotic or anticoagulation treatment: a series of 34 patients. **Luisa CASSINI ASCENCAO**, **Joachim RUNGE (Hannover, Germany)**, **Thomas KINFE**, **Christian BLAHAK**, **Christoph SCHRADER**, **Marc WOLF**, **Assel SARYYEVA**, **Joachim KRAUSS**16:45 ■ #23932 - High frequency stimulation of the subthalamic nucleus restores sensorimotor and motor cortical oscillatory activity in a free-moving rat model of Parkinson's disease. **Arif ABDULBAKI**, **Theodor DOLL**, **Joachim K. KRAUSS**, **Kerstin SCHWABE (Hannover, Germany)**, **Mesbah ALAM**16:50 ■ #23948 - A doption of focused ultrasound thalamotomy for essential tremor: why so much fuss about FUS? **Christian IORIO-MORIN (Sherbrooke, Canada, Canada)**, **Mojgan HODAIE**, **Andres LOZANO**16:55 ■ #23679 - Tremor and quality of life in patients with advanced essential tremor before and after replacing their standard deep brain stimulation with a directional system. **Marie T. KRÜGER (St.Gallen, Switzerland)**, **Josue M. AVECELLAS-CHASIN**, **Mini K. SANDHU**, **Nancy E. POLYCHRONOPOULOS**, **Natasha SARAI**, **Christopher R. HONEY**Grand  
Amphithéâtre

B35

15:00 - 17:00

**PARALLEL SESSION 12**

## Young Functional NS Session

Moderators: **Attilio DELLA TORRE (Italy)**, **Emmanuel DE SCHLICHTING (France)**

15:00 ■ #23792 - Development of Diffusion Tensor Imaging and Tractography for Spinal Cord. **Corentin DAULEAC (LYON)**, **Patrick MERTENS**, **Carole FRINDEL**, **Francois COTTON**

15:10 ■ #23905 - SPECTRE - A dMRI visualization technique for the display of cerebral connectivity. **Marco REISERT**, **Christoph KALLER**, **Horst URBACH**, **Bastian SAJONZ (Freiburg, Germany)**, **Marvin REUTER**, **Peter C. REINACHER**, **Volker Arnd COENEN**

15:20 ■ #23994 - Accuracy, precision and safety of stereotactic, frame-based, intraoperative MRI-guided and MRI-verified deep brain stimulation in 650 consecutive procedures. **Ali RAJABIAN (London Queen Square, United Kingdom)**, **Saman VINKE**, **Joseph CANDELARIO**, **Catherine MILABO**, **Maricel SALAZAR**, **Karim NIZAM**, **Nadia SALLOUM**, **Jonathan HYAM**, **Harith AKRAM**, **Eileen JOYCE**, **Thomas FOLTYNIE**, **Patricia LIMOUSIN**, **Marwan HARIZ**, **Ludvic ZRINZO**

15:35 ■ #23902 - Portable magnetic resonance imaging for intensive care unit patients. **Justin TURPIN (New York City, USA)**, **Prashin UNADKAT**, **Justin THOMAS**, **Nick KLEINER**, **Shahab KHAZANEHDARI**, **Sheshali WANCHOO**, **Kenia SAMUEL**, **Mocclair BETSY**, **Karen BLACK**, **Amir DEHDASHTI**, **Raj NARAYAN**, **Richard TEMES**, **Michael SCHULDER**

15:40 ■ #23935 - Perfusion MRI findings in motor cortex and basal ganglia in Parkinson's disease patients resistant to medical treatment: single centre experiment. **Halime CENKERI**, **Atilla YILMAZ (Istanbul, Turkey)**, **Sadik Ahmet UYANIK**, **Eray ATLI**, **Umut OGUSLU**, **Birnur YILMAZ**, **Burçak GÜMÜŞ**

15:45 ■ #25834 - Feasibility of burr hole ultrasound to improve deep brain structure visualization for neuromodulation. **Jaime TIERNEY (Nashville, USA)**, **Hamid SHAH**, **Michael MIGA**

15:50 ■ #25963 - Evaluating functional connectivity differences between DBS ON/OFF states in essential tremor patients. **Albert FENOY (Houston, USA)**, **Christopher CONNER**, **Z. David CHU**, **Stephen KRALIK**

Salle Major

15:55 ■ #26090 - The FGATIR sequence in DBS: Introducing the rubral wing for DRT depiction and tremor control. **Maarten BOT**, **Rik PAUWELS (Amsterdam, The Netherlands)**, **Pepijn VAN DEN MUNCKHOF**, **Maartje DE WIN**, **Vincent ODEKERKEN**, **Martijn BEUDEL**, **Joke DIJK**, **Rob DE BIE**, **Richard SCHUURMAN**

16:00 ■ #26149 - Distinguishing the motor subthalamic nucleus: a comparison between 7 Tesla MRI and intraoperative microelectrode recordings. **Naomi KREMER (Amsterdam, The Netherlands)**, **Wouter POTTERS**, **José DILAI**, **Varvara MATHIOPOULOU**, **Rob DE BIE**, **Pepijn VAN DEN MUNCKHOF**, **Richard SCHUURMAN**, **Maarten BOT**

16:05 ■ #26180 - Additional imaging to guide surgical implantation of an electrode to relieve poststroke action tremor. **Jana PEETERS (Leuven, Belgium)**, **Evanthia THEODORU**, **Alexandra BOOGERS**, **Myles MC LAUGHLIN**, **Koen VAN LAERE**, **Stefan SUNAERT**, **Bart NUTTIN**

16:10 ■ #26273 - Using functional Ultrasound (fUS) for real-time functional and vascular delineation of brain structures with micrometer-millisecond precision: Towards a new, fully integrated, depth-resolved image-guided neurosurgical tool with multimodal potential. **Sadaf SOLOUKEY (Rotterdam, The Netherlands)**, **Luuk VERHOEF**, **Frits MASTIK**, **Bastian GENEROWICZ**, **Eelke BOS**, **Joost SCHOUTEN**, **Biswadjit HARHANGI**, **Ellen COLLÉE**, **Djaina SATOER**, **Marion SMITS**, **Clemens DIRVEN**, **Chris DE ZEEUW**, **Sebastian KOEKKOEK**, **Arnaud VINCENT**, **Pieter KRUIZINGA**

16:15 ■ #26281 - Structural changes in brains of patients with disorders of consciousness treated with deep brain stimulation. **Marina RAGUŽ (Zagreb, Croatia)**, **Nina PREDRIJEVAC**, **Domagoj DLAKA**, **Darko ORESKOVIC**, **Ante ROTIM**, **Dominik ROMIC**, **Fadi ALMAHARIQ**, **Petar MARCINKOVIC**, **Vedran DELETIS**, **Kostovic IVICA**, **Darko CHUDY**

16:20 ■ #26289 - Evaluation of the short- and long-term rotational stability of directional deep brain stimulation leads. **Marie T. KRÜGER (St.Gallen, Switzerland)**, **Fabian CAVALLONI**, **Yashar NASERI**, **Oliver BOZINOV**, **Georg KÄGI**, **Hägele-Link STEFAN**, **Florian BRUGGER**

16:35 ■ #23400 - Frameless robot-assisted stereotactic biopsies for lesions of the brainstem - a series of 106 consecutive cases. **Iulia PECIU-FLORIANU**, **Victor LEGRAND**, **Apolline MONFILLIETTE-DJELAD**, **Claude-Alain MAURAGE**, **Gustavo TOUZET (LILLE)**, **Nicolas REYNS**

16:40 ■ #23984 - INTRA OPERATIVE FLOW CYTOMETRY FOR DETECTING MALIGNANCY DURING STEREOTACTIC BRAIN TUMOR BIOPSIES. FIRST RESULTS. **George ALEXIOU (IOANNINA, Greece)**, **George VARTHOLOMATOS**, **Spyridon VOULGARIS**

16:45 ■ #23790 - Connectivity profile of deep brain stimulation targets in Tourette syndrome. **Petra HEIDEN**, **Moritz HOEVELS**, **Juan BALDERMANN**, **Veerle VISSER-VANDEWALLE**, **Pablo ANDRADE (Cologne, Germany)**

C35

15:00 - 17:00

## PARALLEL SESSION 13

## Pain

Moderators: **Anne BALOSSIER (France)**, **Ivano DONES (Italy)**, **Ioannis PANOURGIAS (Greece)**

15:00 ■ #26190 - Trigeminal microvascular decompression for refractory chronic short-lasting unilateral neuralgiform headache attacks. **Giorgio LAMBRU**, **Susie LAGRATA**, **Sanjay CHEEMA**, **Andrew LEVY**, **Indran DAVAGANAM**, **Neil KITCHEN**, **Manjit MATHARU**, **Ludvic ZRINZO (London, UK, United Kingdom)**

15:10 ■ #26252 - Prospective Quality-of-Life Assessment and Meta-Analysis of Microvascular Decompression for Elderly Patients with Trigeminal Neuralgia. **Hiroki TODA (Osaka, Japan)**

15:20 ■ #23999 - Neuromodulation in treating complex regional pain syndrome. **Emil ISAGULYAN (Moscow, Russia)**, **Alexey TOMSKY**, **Elizaveta MAKASHOVA**, **Valentina MIKHAILOVA**, **Eugeny DOROCHOV**, **Ekaterina SALOVA**

15:30 ■ #23920 - Operative findings and outcome of microvascular decompression/ adhesiolysis for trigeminal neuralgia in multiple sclerosis. **Gökçe HATIPOGLU MAJERNIK (Hannover, Germany)**, **Shadi AL-AFIF**, **Hans E. HEISSLER**, **Joachim K. KRAUSS**

15:40 ■ #23879 - Sub-perception and supra-perception spinal cord stimulation in chronic pain syndrome: a randomised, semi-double-blind, crossover, placebo-controlled trial. **Paweł SOKAL (Bydgoszcz, Poland)**, **Sara KIEROŃSKA**, **Agnieszka MALUKIEWICZ**, **Marcin RUDAŚ**, **Marcin RUSINEK**

- 15:45 ■ #23907 - SOMATOTOPY OF THE SOMATOSENSORY THALAMUS: CONTRIBUTION FROM DIRECTIONAL DEEP BRAIN STIMULATION IN PATIENTS TREATED FOR REFRACTORY NEUROPATHIC PAIN. [Aurélien LEPLUS WUERTZER \(NICE\)](#), [Michel LANTERI-MINET](#), [Emilie PIQUET](#), [Denys FONTAINE](#)
- 15:50 ■ #23916 - Spinal cord stimulation in the treatment of ischemic pain: Microcirculation and tissue perfusion improvement. [Vladimir MURTAZIN \(Novosibirsk, Russia\)](#), [Roman KISELEV](#), [Martin KILCHUKOV](#), [Asya KLIMKOVA](#), [Kirill ORLOV](#)
- 15:55 ■ #24032 - Multimodality treatment for pain control in multiple sclerosis-related trigeminal neuralgia. [Şükrü AYKOL](#), [Mesut Emre YAMAN \(Ankara, Turkey\)](#), [Burak KARAASLAN](#), [Munibe Busra ERDEM](#), [Enes KARA](#), [Tolga TÜRKMEN](#)
- 16:00 ■ #24079 - Dorsal root ganglion stimulation, a salvage therapy in neuropathic pain syndromes. [László HALÁSZ \(Budapest, Hungary\)](#), [Loránd ERŐSS](#)
- 16:05 ■ #25933 - Gamma Knife radiosurgery for trigeminal autonomic cephalalgias: preliminary results of a single-center prospective study. [Andrea FRANZINI](#), [Zeffirino ROSSINI](#), [Pierina NAVARRIA](#), [Elena CLERICI](#), [Attuati LUCA](#), [Pessina FEDERICO](#), [Piero PICOZZI \(Milano, Italy\)](#)
- 16:10 ■ #26093 - HF-SCS versus LF-SCS in treatment of chronic limb-threatening ischemia (CLTI): results of randomized trial. [Roman KISELEV \(Novosibirsk, Russia\)](#), [Martin KILCHUKOV](#), [Vladimir MURTAZIN](#)
- 16:15 ■ #26196 - Occipital nerve stimulation: a promising option for surgically resistant trigeminal neuralgia. [Anne BALOSSIER \(Marseille\)](#), [Anne DONNET](#), [Jean RÉGIS](#), [Aurélien LEPLUS](#), [Michel LANTERI-MINET](#), [Denys FONTAINE](#)
- 16:20 ■ #26312 - Effects of rate on analgesia in three common use sub-perception SCS: Burst, 1 kHz and 10 kHz - 8 months results in double blind, randomized, multicentre study. [Aleksandra MAJ-KESICKA \(Bydgoszcz, Poland\)](#), [Paweł SOKAL](#), [Marek HARAT](#), [Leszek HERBOWSKI](#), [Zennar KHEDER](#), [Jacek NACEWICZ](#)
- 16:25 ■ #26325 - Occipital nerve stimulation for refractory chronic cluster headache: a cost-effectiveness study. [Julie BULSEI](#), [Aurélien LEPLUS](#), [Jean RÉGIS](#), [Donnet ANNE](#), [Nadia BUISSET](#), [Sylvie RAOUL](#), [Stéphane DERREY](#), [Bechir JARRAYA](#), [Jimmy VOIRIN](#), [Stephan CHABARDES](#), [Sophie COLNAT-COULBOIS](#), [Francois CAIRE](#), [Philippe RIGOARD](#), [Eric FONTAS](#), [Michel LANTERI-MINET](#), [Denys FONTAINE \(NICE\)](#)
- 16:40 ■ #23506 - Motor improvements after Selective Dorsal Rhizotomy (SDR) for GMFCS III and IV levels cerebral palsy children. [Patrick MERTENS](#), [Amelie FUSTIER](#), [Andrei BRINZEU \(Lyon\)](#), [Poirot ISABELLE](#), [Emmanuelle CHALEAT VALAYER](#), [Jean Claude BERNARD](#)
- 16:50 ■ #23649 - Selective microsurgical tibial neurectomy for spastic foot. Effectiveness on Goal Attainment Score (GAS) at one year follow-up. [Corentin DAULEAC \(LYON\)](#), [Jacques LUAUTE](#), [Patrick MERTENS](#)

Espace  
Vieux-Port

15:15

DB5

15:15 - 17:00

## PARALLEL SESSION 14

### Basics - Neurophysiology

Moderators: [Linda ACKERMANS \(The Netherlands\)](#), [Christelle BAUNEZ \(France\)](#)

- 15:15 ■ #24018 - Electrophysiological correlates of fornix deep brain stimulation in a rat model of memory disorders. [Yann-Suhan SENOVA \(Créteil\)](#), [Sara MAHALLATI](#), [Elise GONDARD](#), [Andres LOZANO](#)
- 15:30 ■ #23966 - Online decoding of leg force modulation and locomotor states from STN local field potentials in Parkinson's patients. [Kyuhwa LEE \(Geneva, Switzerland\)](#), [Yohann THENAISIE](#), [Charlotte MOERMAN](#), [Andrea GALVEZ](#), [Flavio RASCHELLÀ](#), [Mayte CASTRO JIMENEZ](#), [Elvira PIRONDINI](#), [Grégoire COURTINE](#), [Jocelyne BLOCH](#), [Eduardo MARTIN MORAUD](#)
- 15:50 ■ #26279 - Directional deep brain stimulation causes distinct intraoperative local field potentials in Parkinson's Disease patients. [Tine VAN BOGAERT \(Leuven, Belgium\)](#), [Jana PEETERS](#), [Alexandra BOOGERS](#), [Bart NUTTIN](#), [Philippe DE VLOO](#), [Myles MC LAUGHLIN](#)
- 15:55 ■ #26092 - Evoked potentials to guide deep brain stimulation programming in Parkinson's disease. [Jana PEETERS \(Leuven, Belgium\)](#), [Alexandra BOOGERS](#), [Tine VAN BOGAERT](#), [Robin GRANSIER](#), [Jan WOUTERS](#), [Bart NUTTIN](#), [Myles MC LAUGHLIN](#)
- 16:00 ■ #26121 - Deep brain stimulation and spinal cord stimulation changes iron and calcium-phosphate metabolism. [Paweł SOKAL \(Bydgoszcz, Poland\)](#), [Sara KIEROŃSKA](#), [Milena ŚWITOŃSKA](#), [Marcin RUDAŚ](#), [Marcin RUSINEK](#), [Marek HARAT](#)
- 16:05 ■ #26135 - Subthalamic local field potential recordings during gait in patients with Parkinson's disease: first experiences with the Percept® neurostimulator. [Claire OLIVIER \(Paris\)](#), [Elodie HAINQUE](#), [Julie BOURILHON](#), [Brian LAU](#), [Carine KARACHI](#), [Marie-Laure WELTER](#)
- 16:10 ■ #26213 - Mapping of directional motor evoked potentials during the DBS surgery. [Yaroslav PARPALEY \(Bochum, Germany\)](#), [Manuel MACHADO LEMOS RODRIGUES](#), [Lars SCHÖNLAU](#), [Sabine SKODDA](#)
- 16:15 ■ #23781 - Evaluating physiologic and structural connectivity of Vim with motor cortex and superior parietal lobule during DBS for tremor. [Christopher CONNER](#), [Kiefer FORSETH](#), [Albert FENOY \(Houston, USA\)](#)
- 16:20 ■ #23472 - Injectable nanoelectrodes enable wireless deep brain stimulation in mice. [Jahanshahi ALI \(Maastricht, The Netherlands\)](#), [Kristen KOZIELSKI](#), [Hunter GILBERT](#), [Yan YU](#), [Önder ERIN](#), [David FRANCISCO](#), [Faisal ALOSAIMI](#), [Yasin TEMEL](#)
- 16:25 ■ #23524 - High frequency stimulation of the subthalamic nucleus reveals a functional link between the basal ganglia and midbrain 5-HT system via the lateral habenula nucleus. [Sonny TAN \(Aachen, Germany\)](#), [Henrike HARTUNG](#), [Trevor SHARP](#), [Yasin TEMEL](#)
- 16:30 ■ #23942 - Epigenetic regulation of neurological key factors in rats after fastigial nucleus lesions. [Simeon O. A. HELGERS](#), [Marc A. N. MUSCHLER](#), [Alexander GLAHN](#), [Shadi AL-AFIF](#), [Yazeed AL KRINAWA](#), [Elvis J. HERMANN](#), [Joachim K KRAUSS](#), [Helge FRIELING](#), [Kerstin SCHWABE \(Hannover, Germany\)](#), [Mathias RHEIN](#)
- 16:35 ■ #23977 - Frequency-dependent medial septal nucleus deep brain stimulation modulates hippocampal oscillatory activity and improves spatial working memory in an MK-801 model of schizophrenia. [Nancy ZEPEDA](#), [Gengxi LU](#), [Raymond GIFFORD](#), [Darrin LEE \(Los Angeles, USA\)](#)

Salle 120

## Friday 10 September

17:00

A36

17:00 - 18:30

## ESSFN GENERAL ASSEMBLY

Grand  
Amphithéâtre

## Saturday 11 September

08:30

A41

08:30 - 10:30

## PLENARY SESSION 7A

Moderators: **Christelle BAUNEZ (France)**, **Jean REGIS (France)**Grand  
Amphithéâtre08:30 ■ To sleep or not to sleep: that is the question for DBS procedures and Parkinson's disease. **Hagai BERGMAN (Israel)**09:00 ■ Immunity in the brain and radiosurgery. **Bodo LIPPITZ (Germany)**09:30 ■ Deciphering the hodology of essential tremor. **Constantin TULEASCA (Switzerland)**10:00 ■ The future of Epilepsy Surgery. **Hans CLUSMANN (Germany)**

10:30

COFFEE BREAK &amp; VISIT OF POSTERS AND EXHIBITION

11:00

A42

11:00 - 12:00

## PLENARY SESSION 7B

Moderators: **Jocelyne BLOCH (Switzerland)**, **Viktor JIRSA (France)**, **Joachim K. KRAUSS (Germany)**Grand  
Amphithéâtre11:00 ■ Controversies in movement disorders surgery: Should we offer DBS to dystonia patients regardless of etiology? **Joachim K. KRAUSS (Germany)**11:30 ■ #26205 - Long-term outcomes of ventral tegmental area deep brain stimulation for trigeminal autonomic cephalalgias. **Olga PARRAS GRANERO (London, United Kingdom)**, **Sanjay CHEEMA**, **Susie LAGRATA**, **Jonathan HYAM**, **Ludvic ZRINZO**, **Manjit MATHARU**, **Harith AKRAM**11:45 ■ Connectivity Changes in the Salience Network after Cordotomy and Cingulotomy for Cancer Pain. **Ido STRAUSS (Israel)**

12:00

A43

12:00 - 12:30

## ESSFN SEARCH GRANT AND AWARDS 2021

Moderators: **Jocelyne BLOCH (Switzerland)**, **Antonio GONÇALVES FERREIRA (Portugal)**, **Jean REGIS (France)**Grand  
Amphithéâtre■ 3 Best oral communications and 3 best Posters. **Niels Anthony VAN DER GAAG (The Netherlands)**, **Kuan Hua KHO (The Netherlands)**, **Martin JAKOBS (Germany)**■ Best Publication. **Juan Antonio BARCIA (Spain)**, **Patric BLOMSTEDT (Sweden)**, **Lorand EROSS (Hungary)**■ Best research awards. **Jocelyne BLOCH (Switzerland)**, **Stephan CHABARDÈS (France)**, **Bart NUTTIN (Belgium)**

00:00

EP01

00:00 - 00:00

EPOSTERS  
BASIC SCIENCE■ #24072 - Changes in the patient's cognitive status at the spinal cord stimulation. **Andrei SHAPKIN (Tyumen, Russia)**, **Albert SUFIANOV**, **Galina SUFIANOVA**■ #26256 - Effects of high frequency stimulation of the subthalamic nucleus in Parkinsonian mice on the acetylcholinergic system of the pedunculopontine nucleus. **Sonny TAN (Aachen, Germany)**, **Victoria WITZIG**, **Faisal ALOSAIMI**, **Hans CLUSMANN**, **Yasin TEMEL**, **Ali JAHANSHAH**■ #23349 - Influence of DBS-like electric stimulation on inflammatory mediators in-vitro. **Henri MOLKEWEHRUM**, **Carolin KUBELT**, **Michael SYNOWITZ**, **Janka HELD-FEINDT**, **Ann-Kristin HELMERS (Kiel, Germany)**■ #25856 - Minimising post-op micro-hemorrhages in the milieu of the DBS electrode by using bipolar stimulation - an in-vitro experiment. **Hargunbir SINGH (Chandigarh, India)**, **Nishit SAWAL**, **Arnav MITTAL**, **Divij SINGHAL**, **Adhish BERI**, **Gurmehar HUNDAL**, **Saloni Rani KUMAR**, **Ansh CHAWLA**



- #24071 - Renal hemodynamic and excretory function at spinal cord stimulation. [Andrei SHAPKIN](#) (Tyumen, Russia), [Albert SUFIANOV](#), [Galina SUFIANOVA](#), [Olga SADYKOVA](#), [Tamara ISHENKO](#)
- #23500 - Stereo-EEG with microelectrodes: Single neurons in human medial temporal lobe encode ego- and allocentric direction during virtual spatial navigation. [Peter C. REINACHER](#) (Freiburg, Germany), [Lukas KUNZ](#), [Bernhard P. STARESINA](#), [Armin BRANDT](#), [Nora A. HERWEG](#), [Melina TSITSIKLIS](#), [Michael J. KAHANA](#), [Joshua JACOBS](#), [Andreas SCHULZE-BONHAGE](#)

## EP02

00:00 - 00:00

EPOSTERS  
EPILEPSY

- #26155 - Angiocentric Glioma - a case report of a rare entity. [António CUCO](#) (Lisbon, Portugal), [Alexandra SANTOS](#), [Francisca SA](#), [José Paulo MONTEIRO](#), [Nuno CANAS](#), [Jose Carlos FERREIRA](#), [Mrinalini HONAVAR](#), [Pedro CABRAL](#), [Jose CABRAL](#)
- #22509 - Deep brain stimulation of the anterior nuclei of the thalamus relieves basal ganglia dysfunction in monkeys with temporal lobe epilepsy. [Guanyu ZHU](#) (Beijing, China), [Chen YINGCHUAN](#), [Tingting DU](#), [Jianguo ZHANG](#)
- #21777 - First experience of endoscopic transsphenoidal resection of hypothalamic hamartoma. [Vladimir KRYLOV](#), [Igor TRIFONOV](#) (Moscou, Russia), [Guekht ALLA](#), [Mikhail SINKIN](#), [Igor KAĪMOVSKIĪ](#), [Andrey GRYGORIEV](#), [Elena GRYGORIEVA](#)
- #23926 - Initial experience of an O-Arm®-based neuronavigated and Vertek®-assisted stereo-electroencephalography for drug-resistant epilepsy. [Vasco PINTO](#), [Sérgio SOUSA](#), [Eduardo CUNHA](#) (Porto, Portugal), [Carla SILVA](#), [Rui RANGEL](#), [Alfredo CALHEIROS](#)
- #21775 - Invasive EEG monitoring for presurgical evaluation in patients with drug resistant form of epilepsy. [Vladimir KRYLOV](#), [Igor TRIFONOV](#) (Moscou, Russia), [Guekht ALLA](#), [Mikhail SINKIN](#), [Igor KAĪMOVSKIĪ](#)
- #23986 - Neurocognitive outcome after laser interstitial ablation for temporal lobe epilepsy, a systematic review and meta analysis. [Soha A ALOMAR](#) (Jeddah, Saudi Arabia), [Rana MOSHREF](#), [Leena MOSHREF](#), [Abdulrahman SABBAGH](#)
- #25795 - Quality of life after deep brain stimulation for epilepsy. [Jacco SMEETS](#), [Linda ACKERMANS](#) (Maastricht, The Netherlands), [Ghislaïne VAN MASTRIGT](#), [Rob ROUHL](#), [Louis WAGNER](#), [Sander VAN KUIJK](#), [Jeske NELISSEN](#), [Ilse VAN STRAATEN](#), [Kuan KHO](#), [Francesca SNOEIJEN-SCHOUWENAARS](#), [Anne-Marthe MEPELINK](#), [Sylvia KLINKENBERG](#), [Kim RIJKERS](#), [Marian MAJOIE](#)
- #21776 - Types of epileptogenic lesions in patients with drug-resistant forms of epilepsy. [Vladimir KRYLOV](#), [Igor TRIFONOV](#) (Moscou, Russia), [Guekht ALLA](#), [Anna LEBEDEVA](#), [Mikhail SINKIN](#), [Igor KAĪMOVSKIĪ](#)
- #21774 - VNS - second chance after failed resective epilepsy surgery. [Vladimir KRYLOV](#), [Igor TRIFONOV](#) (Moscou, Russia), [Guekht ALLA](#), [Mikhail SINKIN](#), [Igor KAĪMOVSKIĪ](#)

## EP03

00:00 - 00:00

EPOSTERS  
ETHICS

- #23952 - "e;Utility of volume of tissue activated-modeling for clinical stimulation parameters in DBS patients. [Linus KOESTER](#) (Gothenburg, Sweden), [Thomas SKOGLUND](#), [Johan LJUNQVIST](#)
- #23886 - Assessing the accuracy of intraoperative 3D fluoroscopy to predict correct electrode position during deep brain stimulation surgery. [Manuel PINTO](#) (Porto, Portugal), [Clara CHAMADOIRA](#), [Rui VAZ](#)
- #23909 - BrainCubes - MRI histology of the human reward system. [Marco REISERT](#) (Freiburg, Germany), [Shi Jia TEO](#), [Andrea WESSOLLECK](#), [Máté DÖBRÖSSY](#), [Andreas VLACHOS](#), [Volker Arnd COENEN](#)
- #24000 - C1C2 puncture under FP navigation: a safe and useful procedure. [Hayat BELAÏD](#) (PARIS), [Jean-Baptiste THIÉBAUT](#), [Vincent D'HARDEMARE](#), [Pierre BOURDILLON](#), [Alister ROGERS](#), [Philippe AUTRET](#), [Claire-Marie RANGON](#), [Catherine VIART](#)
- #26262 - DBviS - A visualization tool of DBS research data. [Teresa NORDIN](#) (Linköping, Sweden), [Fabiola ALONSO](#), [Dorian VOGEL](#), [Johannes JOHANSSON](#), [Simone HEMM](#), [Karin WÄRDELL](#)
- #23936 - Does cable-bound stimulation and recording of neuronal activity affect rat's wellbeing? [Laura WASSERMANN](#), [Ann-Kristin RIEDESEL](#), [Simeon HELGERS](#), [Mesbah ALAM](#), [Christine HÄGER](#), [Joachim KRAUSS](#), [Kerstin SCHWABE](#) (Hannover, Germany)
- #26087 - Effect of the Trajectory Angle on Idiopathic Delayed Onset Edema in DBS. [Patrick O'DONNELL](#) (Amsterdam, The Netherlands), [Pepijn VAN DEN MUNCKHOF](#), [Catherine M.k.e DE CUBA](#), [Rob M.a. DE BIE](#), [P. Richard SCHUURMAN](#), [Maarten BOT](#)
- #23904 - Expanding applicability of intraoperative cone beam (O-arm) CT in stereotactic neurosurgery. [Hisse ARNTS](#) (Amsterdam, The Netherlands), [Rick SCHUURMAN](#), [Jantien HOOGLMOED](#), [Pepijn VAN DEN MUNCKHOF](#), [Maarten BOT](#)
- #26283 - Frameless stereotactic brain biopsy: A prospective study on robot-assisted brain biopsies performed on 32 patients by using the RONNA G4 system. [Domagoj DLAKA](#) (Zagreb, Croatia), [Švaco MARKO](#), [Darko CHUDY](#), [Jerbić BOJAN](#), [Šekoranja BOJAN](#), [Šuligoj FILIP](#), [Vidaković JOSIP](#), [Dominik ROMIC](#), [Marina RAGUŽ](#)
- #23337 - MRI 3T Multi-channel Radiofrequency Safety Assessment of DBS Systems. [M. Arcan ERTURK](#), [Mark CONROY](#), [Thomas BRIONNE](#) (Tolochenaz, Switzerland), [Jacob CHATTERTON](#), [S. Riki BANERJEE](#)
- #26133 - Optical guidance tool for frameless brain tumour needle biopsy. [Elisabeth KLINT](#) (Linköping, Sweden), [Johan RICHTER](#), [Karin WÄRDELL](#)
- #26260 - Orientation detection of deep brain stimulation electrodes based on neuronavigation with an embedded magnetic sensor. [Celine VERGNE](#) (Muttentz, Switzerland), [Morgan MADEC](#), [Joris PASCAL](#), [Simone HEMM](#)
- #23971 - Perivascular spaces as a potential risk marker for intracerebral hemorrhage in DBS surgery - a retrospective investigation. [Timo Sebastian BRUGGER](#), [Marco REISERT](#), [Christoph KALLER](#), [Egger KARL](#), [Volker Arnd COENEN](#), [Bastian Elmar Alexander SAJONZ](#) (Freiburg, Germany)
- #26250 - StereoSlicer, a plugin for 3DSlicer to handle data from stereotactic surgeries. [Dorian VOGEL](#) (Basel, Switzerland), [Johansson JOHANNES](#), [Nordin TERESA](#), [Karin WÄRDELL](#), [Simone HEMM](#)

- #26123 - Tractography Alterations in the Arcuate and Uncinate Fasciculi in Post-Stroke Aphasia modulated by tDCS. [Sara KIEROŃSKA](#) (Bydgoszcz, Poland), [Milena ŚWITOŃSKA](#), [Paweł SOKAL](#)
- #26122 - Tractography changes in the forceps minor and superior longitudinal fasciculus after cingulotomy in patient with obsessive-compulsive disorder. [Sara KIEROŃSKA](#) (Bydgoszcz, Poland), [Paweł SOKAL](#), [Marcin RUDAŚ](#), [Banasiak ANNA](#), [Marcin RUSINEK](#)

## EP05

00:00 - 00:00

EPOSTERS  
MOVEMENT DISORDERS

- #26189 - 3T Magnetic Resonance-guided Focused Ultrasound (MRgFUS) unilateral thalamotomy of Vim (ventral intermediate nucleus) in patients with essential tremor: three-years clinical experience of a single center. [Giorgia BULGARELLI](#) (Verona, Italy), [Stefano TAMBURIN](#), [Giuseppe Kenneth RICCIARDI](#), [Michele LONGHI](#), [Emanuele ZIVELONGHI](#), [Tommaso BOVI](#), [Stefania MONTEMEZZI](#), [Roberto FORONI](#), [Antonio NICOLATO](#)
- #23965 - ACTIVA systems for deep brain stimulation: an analysis on a prospective, multicenter Product Surveillance Registry (PSR) to meet the reimbursement requirements of the French Haute Autorité de Santé (HAS). [Stéphane PALFI](#) (PARIS), [Emmanuel CUNY](#), [Jean-Philippe AZULAY](#), [Luc DEFEBVRE](#), [Soledad NAVARRO](#), [Philippe COUBES](#), [Franck DURIF](#), [Apolline ADE](#), [Pierre-Antoine GROHARD](#), [Christian AUBLANT](#), [Thomas BRIONNE](#), [Keisha SANDBERG](#), [Todd WEAVER](#)
- #26099 - Awake versus asleep STN-DBS for Parkinson's disease: asleep as a feasible alternative. [Sarah HENDRICKX](#) (Ghent, Belgium), [Stijn VANDAMME](#), [Frederik CLEMENT](#), [Jeroen VAN LERBEIRGHE](#), [Dimitri VANHAUWAERT](#), [Olivier VAN DAMME](#)
- #23930 - Bilateral deep brain stimulation of the internal globus pallidus for severe refractory tardive syndromes: multicentric experience and evidence-based recommendations. [Oscar ESCOBAR](#) (Cali, Colombia), [Javier OROZCO](#), [Gabriel ARANGO](#), [Juan RIVERA](#)
- #23964 - Bilateral double beta peaks in a PD-patient with STN-electrodes and „brainsensing“. [Jan MEHRKENS](#) (München, Germany), [Thomas KÖGLSPERGER](#), [Kai BÖTZEL](#)
- #26115 - Cerebellar and sensorimotor cortical connectivity predicts outcomes of pedunculopontine nucleus stimulation in Parkinson's disease. [Ashley RAGHU](#) (Oxford, United Kingdom), [Tariq PARKER](#), [John STEIN](#), [Jesper ANDERSSON](#), [Stephen PAYNE](#), [Tipu AZIZ](#), [Alex GREEN](#)
- #23784 - Clinical deep brain stimulation targeting based on an inverse problem approach. The artificial intelligence solution. [Julien ENGELHARDT](#), [François CAIRE](#), [Nejib ZEMZEMI](#), [Denis FONTAINE](#), [Dominique GUEHL](#), [Pierre BURBAUD](#), [Nathalie DAMON-PERRIERE](#), [Wassilios MEISSNER](#), [Caroline GIORDANA](#), [Michel BORG](#), [Emmanuel CUNY](#) (Bordeaux)
- #23992 - Comparison of DBS devices lifespan for the treatment of Parkinson's disease with corresponding meta-analysis of the literature. [Andrei BRINZEU](#) (Lyon), [Theo BRUSSOLLE](#), [Emile SIMON](#), [Gustavo POLO](#), [Teodor DANAILA](#), [Chloe LAURENCIN](#), [Stephane THOBOIS](#), [Patrick MERTENS](#)
- #25487 - DBS Implantable Pulse Generator Trauma Protection Pad; a novel solution to reduce trauma induced IPG explantation. [Adhish BERI](#) (Chandigarh, India), [Hargunbir SINGH](#), [Nishit SAWAL](#)
- #26127 - Decrease of daytime sleepiness by deep brain stimulation of pedunculopontine nucleus area in parkinsonian non-human primate. [Aurélie DAVIN](#) (Grenoble), [Stephan CHABARDES](#), [Olivier DAVID](#), [Napoléon TORRES-MARTINEZ](#), [Brigitte PIALLAT](#)
- #22675 - Deep brain stimulation and lesioning surgery - a three year start in Bangladesh. [Mohammad ZAHID RAIHAM](#) (Dhaka, Bangladesh)
- #23997 - Deep brain stimulation, subthalamic nucleus with its motor networks. [Luis Mariano ROJAS-MEDINA](#) (Madrid, Spain), [Lucia ESTEBAN-FERNANDEZ](#), [Daniel LOURIDO-GARCÍA](#)
- #24031 - Deep brain stimulation-electrodes may rotate after implantation - an animal study. [Peter C. REINACHER](#) (Freiburg, Germany), [Volker Arnd COENEN](#), [Horst URBACH](#), [Karl EGGER](#), [Alexander RAU](#)
- #23995 - Deep brain stimulation: Shaving versus not shaving? [Luis Mariano ROJAS-MEDINA](#) (Madrid, Spain), [Lucia ESTEBAN-FERNANDEZ](#), [Freddy SALGE-ARRIETA](#)
- #23462 - Directional Lead in Deep Brain Stimulation for Parkinson's Disease - Hong Kong Experience. [Tak Lap POON](#) (Hong Kong, Hong Kong)
- #23911 - Emergency deep brain stimulation in a girl with dystonic storm due to GNAO1-associated hyperkinetic-dystonic movement disorder. [Assel SARYYEVA](#) (Germany, Germany), [Jan-Christoph SCHOENE-BAKE](#), [Thomas JACK](#), [Eva BUELTMANN](#), [Hans HARTMANN](#), [Joachim K. KRAUSS](#)
- #26270 - Evidence of possible bias in pre-surgical assessment of Parkinson's disease using levodopa challenges. [Gareth MORINAN](#), [Jonathan O'KEEFFE](#) (London, United Kingdom)
- #23655 - Freezing of Gait as a Complication of Bilateral Pallidal Deep Brain Stimulation in a Patient with Tardive Dystonia. [Michał SOBSTYL](#) (Warsaw, Poland), [Angelika STAPIŃSKA-SYNIĘC](#), [Anna KUPRYJANIUK](#)
- #23960 - Globus pallidus internus deep brain stimulation for the treatment of axial dystonia. [Kantharuby TAMBIRAJOO](#) (London, United Kingdom), [Luciano FURLANETTI](#), [Michael SAMUEL](#), [Keyoumars ASHKAN](#)
- #23895 - Imaging insights of isolated idiopathic dystonia: a voxel-based morphometry study and meta-analysis. [Yunhao WU](#) (Shanghai, China), [Jie FENG](#), [Yufei LI](#), [Ming ZHANG](#), [Chencheng ZHANG](#), [Hongxia LI](#), [Tao WANG](#), [Bomin SUN](#), [Yiwen WU](#), [Dianyou LI](#), [Hongjiang WEI](#)
- #26144 - Impact of subthalamic deep brain stimulation on motor and sensorimotor cortical oscillatory activity in free-moving hemiparkinsonian rats. [Arif ABDULBAKI](#) (Hannover, Germany), [Theodor DOLL](#), [Joachim K. KRAUSS](#), [Kerstin SCHWABE](#), [Mesbah ALAM](#)
- #22651 - Improving programming in Deep brain stimulation using the GuideXT Assisted Refinement and Optimisation Workflow (GROW). [Mohammed HUSSAIN](#) (Newcastle, United Kingdom)
- #22508 - Is DBS really successful in Lance-Adams Syndrome? [Gulsah OZTURK](#) (Istanbul, Turkey), [Selcuk PEKER](#)
- #23785 - Long term recording of human STN local field potentials in Parkinson's disease after deep brain stimulation. [Manuel PINTO](#) (Porto, Portugal), [Ana OLIVEIRA](#), [Clara CHAMADOIRA](#), [Rui VAZ](#), [João MASSANO](#)
- #21902 - Long-term Outcome of Subthalamic Nucleus Deep Brain Stimulation for Parkinson's Disease. [Park HYERAN](#) (SEOUL, Korea, Republic of)

- #22502 - Management of Cervical Dystonia Patient with Deep Brain Stimulation During Pregnancy and Review of the Literature. [Gulsah OZTURK](#) (Istanbul, Turkey), [Selcuk PEKER](#), [Gokalp SILAV](#)
- #26186 - MDS UPDRS Item-Based Rigidity and Postural Stability Score Estimations: A Data-Driven Approach. [Zhengyu LIN](#) (Shanghai/Lyon, China), [Rui GUO](#), [Chen Cheng ZHANG](#), [Dianyong LI](#), [Xiaohua QIAN](#), [Bomin SUN](#)
- #23918 - Monitoring Cognitive and Emotional Functioning of Patients with Parkinson's Disease after Unilateral Deep Brain Stimulation of the Subthalamic Nucleus - Preliminary Results from the 12-month Follow-up. [Szczepan IWANSKI](#) (Warsaw, Poland), [Katarzyna POLANOWSKA](#), [Michał SOBSTYL](#), [Angelika STAPIŃSKA-SYNIĘC](#), [Aleksandra ZIELIŃSKA](#), [Marcin LEŚNIAK](#), [Joanna SENIÓW](#)
- #23976 - MR-guided High Intensity Focus Ultrasound for treatment of post traumatic tremor: a case report. [Alana ARCADÍ](#) (Pamplona, Spain), [Jorge GURIDI](#), [Iciar AVILES](#), [Lain GONZALEZ-QUARANTE](#), [María Cruz RODRÍGUEZ](#), [María GOROSPE](#)
- #23981 - Pallidal Deep Brain Stimulation for involuntary movement after anti-N-methyl-D-aspartate (NMDA) receptor encephalitis. [Takefumi HIGASHIJIMA](#) (Yokohama, Japan), [Takashi KAWASAKI](#), [Katsuo KIMURA](#), [Yu TSUYUSAKI](#), [Hitaru KISHIDA](#), [Katsumi SAKATA](#), [Tetsuya YAMAMOTO](#)
- #23821 - Preliminary experience with the use of robot assisted laser interstitial thermotherapy in functional neurosurgery. [Meshal JAREBI](#) (Amiens), [Michel LEFRANC](#), [Johann PELTIER](#)
- #26080 - Quantifying stridor associated with parkinsonism and deep brain stimulation a case report. [Timothy GROVER](#) (London, United Kingdom), [Viswas DAYAL](#), [Alexis DE ROQUAUREL](#), [Adrian FOUCIN](#), [Patricia LIMOUSIN](#), [Tom FOLTYNIE](#)
- #24081 - Reduced cerebellar lobule volumes in essential tremor. [Richard ÅGREN](#), [Amar AWAD](#), [Patric BLOMSTEDT](#), [Anders FYTAGORIDIS](#) (Stockholm, Sweden)
- #23946 - Single-centre analysis of precision and precision-influencing factors in deep brain stimulation. [Linus KOESTER](#) (Gothenburg, Sweden), [Thomas SKOGLUND](#), [Johan LJUNQVIST](#)
- #24001 - Spinal cord stimulation in Parkinson's disease and Parkinsonism: 10 years later, review of the literature and future prospects. [Jean-Baptiste THIÉBAUT](#) (PARIS), [Vincent D'HARDEMARE](#), [Jean-Philippe BRANDEL](#), [Cécile HUBSCH](#), [Didier PRADON](#), [Laurent GOETZ](#), [Nathalie PATTE-KARSENTI](#), [Marc ZIEGLER](#)
- #23659 - Subcutaneous Pneumothorax in a Patient with Cervical Dystonia as a Rare Complication of Deep Brain Stimulation Procedure. [Michał SOBSTYL](#) (Warsaw, Poland), [Angelika STAPIŃSKA-SYNIĘC](#), [Anna KUPRYJANIUK](#)
- #23957 - Subthalamic nucleus deep brain stimulation in post-infarct dystonia. [Kantharuby TAMBIRAJOO](#) (London, United Kingdom), [Luciano FURLANETTI](#), [Michael SAMUEL](#), [Keyoumars ASHKAN](#)
- #23941 - The Effect of Subthalamic Nucleus - Deep Brain Stimulation and Different Stimulation Frequencies on Cerebral Hemodynamics in Parkinson's Disease. [Atilla YILMAZ](#) (Istanbul, Turkey), [Orkun KOBAN](#), [Mustafa Turgut YILDIZGOREN](#)
- #23979 - The role of sedation in patient's ability to cooperate during DBS surgery. A pilot study. [Arian LENAS](#), [George ALEXIOU](#) (IOANNINA, Greece), [Zigouris ANDREAS](#), [Spyridon VOULGARIS](#)
- #23664 - Tremulous Cervical Dystonia Treated by Bilateral Pallidal Stimulation. Case Series Report. [Michał SOBSTYL](#) (Warsaw, Poland), [Angelika STAPIŃSKA-SYNIĘC](#), [Anna KUPRYJANIUK](#)
- #24084 - Unilateral Vim and cZi DBS for treatment of spasmodic dysphonia and arm tremor. [Bjartur SÆMUNDSSON](#), [Catarina WERSCH](#), [Ellika SCHALLING](#), [Mathias SUNDGREN](#), [Göran LIND](#), [Anders FYTAGORIDIS](#) (Stockholm, Sweden)
- #23924 - Vim anatomical variability: an MRI structural connectivity study. [Francisca FERREIRA](#) (London, United Kingdom), [Harith AKRAM](#), [John ASHBURNER](#), [Hui ZHANG](#), [Ludvic ZRINZO](#), [Christian LAMBERT](#)

## EP06

00:00 - 00:00

EPOSTERS  
NEUROPHYSIOLOGY

- #26130 - Cortical activity in an acute rodent model of Parkinson: possible use for adaptive deep brain stimulation. [Mesbah ALAM](#) (Hannover, Germany), [Ali Abdul Nabi ALI](#), [Simon KLEIN](#), [Nicolai BEHMANN](#), [Theodor DOLL](#), [Holge BLUME](#), [Joachim K. KRAUSS](#), [Kerstin SCHWABE](#)
- #26297 - Effect of directional deep brain stimulation of the subthalamic nucleus on the behavior in healthy non-human primate. [Mathilde BERTRAND](#) (FRANCE), [Stephan CHABARDES](#), [Julien BASTIN](#), [Brigitte PIALLAT](#)
- #23424 - Intraoperative electrophysiology during deep brain surgeries in disorders of consciousness. [Jérôme COSTE](#) (Clermont-Ferrand), [Anna SONTHEIMER](#), [Bénédicte PONTIER](#), [Jean-Jacques LEMAIRE](#), [Dbs-Post-Coma STUDY GROUP](#)

## EP07

00:00 - 00:00

EPOSTERS  
ONCOLOGY

- #23925 - Initial experience of an O-Arm-based neuronavigated laser interstitial thermal therapy for malignant brain tumors. [Vasco PINTO](#), [Sérgio SOUSA](#), [Eduardo CUNHA](#) (Porto, Portugal), [Carla SILVA](#), [Alfredo CALHEIROS](#)

## EP08

00:00 - 00:00

EPOSTERS  
OTHER

- #26215 - Feasibility and safety of functional magnetic resonance imaging in patients treated with deep brain stimulation: a systematic review. [Kay VAN HEESWIJK](#), [Tim A.m. BOUWENS VAN DER VLIS](#), [Albert F.g. LEENTJENS](#), [Sarah HESCHAM](#), [Christopher WIGGINS](#), [Linda ACKERMANS](#) (Maastricht, The Netherlands)
- #23974 - Repetitive transcranial magnetic stimulation in patient with lesions in functional areas. [Felix BREHAR](#), [Tatiana CIUREA](#), [Jean CIUREA](#) (Bucharest, Romania)
- #23928 - Robot-assisted laser interstitial thermal therapy in functional neurosurgical applications: An initial experience. [Michel LEFRANC](#), [Albéric BOCCO](#) (CASABLANCA, Morocco), [Jean Marcel OKAMON](#), [Pierre-Henri LAUNOIS](#), [Johann PELTIER](#)
- #23503 - Stereotactic ventriculocisternostomy reduces delayed infarction and improves outcome in patients with aneurysmal subarachnoid hemorrhage. [Peter C. REINACHER](#) (Freiburg, Germany), [Jan Hendrik SCHAEFER](#), [Christian SCHEIWE](#), [Karl EGGER](#), [Wolf-Dirk NIESEN](#), [Jürgen BECK](#), [Volker Arnd COENEN](#), [Roland ROELZ](#)
- #24086 - What do physicians and medical students know about deep brain stimulation? Results from the Swiss DBSurvey. [Philipp KRAUSS](#) (Munich, Germany), [Pierre SCHEFFLER](#), [Lennart H. STIEGLITZ](#), [Christian R. BAUMANN](#), [Luca REGLI](#), [Markus F. OERTEL](#)

## EP09

00:00 - 00:00

EPOSTERS  
PAIN

- #26125 - An unusual case of lead migration in occipital nerve stimulation: A case report and literature review. [Rafael CAIADO VENCIO](#) (Goiânia, Brazil), [Paulo Eduardo ALBUQUERQUE ZITO RAFFA](#), [André COSTA CORRAL PONCE](#), [Bruno PRICOLI MALAMUD](#), [César COZAR PACHECO](#), [Paulo Roberto FRANCESCHINI](#), [Roger THOMAZ ROTTA MEDEIROS](#), [Paulo Henrique PIRES DE AGUIAR](#)
- #23892 - Analgesic effect of paddle type SCS was the most prominent in ongoing pain and pain duration. [Moonyoung CHUNG](#) (Bucheon, Korea, Republic of), [Ryoong HUH](#)
- #24024 - Bilateral stereotactic anterior cingulotomy for intractable pain caused thalamic glioma. [Kostiantyn KOSTIUK](#) (KYIV, Ukraine), [Yuri MEDVEDEV](#), [Andriy POPOV](#), [Valerii CHEBURAKHIN](#), [Maxim SHEVELOV](#), [Sergii DICHKO](#)
- #26108 - Connectivity based thalamus parcellation and surgical targeting of somatosensory subnuclei. [Ashley RAGHU](#) (Oxford, United Kingdom), [Sean MARTIN](#), [Tariq PARKER](#), [Tipu AZIZ](#), [Alex GREEN](#)
- #26073 - Convenience, usability and complications of rechargeable extracorporeal pulse generators for wireless spinal cord stimulation: A questionnaire-based, patient-centric study. [Mohammad Mehdi HAJIABADI](#) (Heidelberg, Germany), [Martin JAKOBS](#), [Andreas UNTERBERG](#), [Rezvan AHMADI](#)
- #23787 - Dorsal column and dorsal horn high-frequency stimulation as a rescue therapy in patients with chronic non-cancer pain refractory to chronic conventional SCS. [Pablo ANDRADE](#) (Cologne, Germany), [Petra HEIDEN](#), [Veerle VISSER-VANDEWALLE](#), [Georgios MATIS](#)
- #26118 - Dorsal root entry zone lesioning for medically refractory pain. [Giovanna GALAFASSI](#), [Paulo Henrique PIRES DE AGUIAR](#) (São Paulo, Brazil), [André AKIRA TAKAHASHI](#), [Jorge Roberto PAGURA](#)
- #23923 - Examining the need for routine intensive care unit admission after microvascular decompression. [Gökce HATIPOGLU MAJERNIK](#) (Hannover, Germany), [Shadi AL-AFIF](#), [Hans E. HEISLER](#), [Oday ATALLAH](#), [Joachim K. KRAUSS](#)
- #23959 - High frequency sulcomyotomy (DREZ) in patients with pre - and postganglionic lesion of the spinal cord. [Oleg DREVAL](#), [Alexey KUZNETSOV](#), [Kristina LYUBIMAYA](#) (Moscow, Russia)
- #25757 - High-cervical spinal cord stimulation and idiopathic trigeminal neuralgia/neuropathy. [Enes GÜNDÜZ](#) (Cologne, Germany), [Veerle VISSER-VANDEWALLE](#), [Georgios MATIS](#)
- #23970 - Invasive neuromodulation in facial pain syndromes. [Emil ISAGULYAN](#) (Moscow, Russia), [Eugeny DOROCHOV](#), [Alexey TOMSKY](#), [Elisaveta MACKASCHOVA](#), [Valentina MIKHAILOVA](#)
- #26074 - Manageability, compatibility and complications of rechargeable internal pulse generators for spinal cord stimulation: A single-center Pain Recharge Trial. [Martin JAKOBS](#) (Heidelberg, Germany), [Mohammad Mehdi HAJIABADI](#), [Andreas UNTERBERG](#), [Rezvan AHMADI](#)
- #23991 - Microsurgical DREZotomy for Brachial Plexus Injury (video Presentation). [Andrei BRINZEU](#) (Lyon), [Corentin DAULEAC](#), [Patrick MERTENS](#), [Marc SINDOU](#)
- #23988 - Microsurgical DREZotomy for cancer pain (video presentation). [Andrei BRINZEU](#) (Lyon), [Patrick MERTENS](#), [Marc SINDOU](#), [Manon DURAFFOURG](#)
- #23921 - Microsurgical re-decompression for recurrent trigeminal neuralgia after previous microvascular decompression. [Gökce HATIPOGLU MAJERNIK](#) (Hannover, Germany), [Shadi AL-AFIF](#), [Hans E. HEISLER](#), [Joachim K. KRAUSS](#)
- #26197 - Neurosurgical interventions for intractable oncological pain: a national survey. [Anne BALOSSIER](#) (Marseille), [Florence TIBERGHEN](#), [Claire SMALL-BERGEONNEAU](#), [Bich DANG-VU](#), [Karima MEZAIB](#), [Sylvie ROSTAING](#), [Naoufel OUERCHEFANI](#), [Hayat BELAID](#)
- #23789 - Peripheral nerve field stimulation in the craniofacial region: a single center study. [Petra HEIDEN](#), [Petros IOANNU](#), [Veatriki VENETI](#), [Veerle VISSER-VANDEWALLE](#), [Georgios MATIS](#), [Pablo ANDRADE](#) (Cologne, Germany)
- #26294 - Progressive and late onset lifethreatening adverse effect of spinal cord stimulation for chronic pain treatment. [Carla REIZINHO](#), [Alexandra SANTOS](#), [Antonio BARATA](#), [Ana LUIS](#), [Andre CAETANO](#), [Marcelo MENDONÇA](#), [Lidia CUNHA](#), [Catarina JESUS](#), [Naide FERREIRA](#), [Cuco ANTONIO](#) (Lisbon, Portugal)
- #23980 - Punction of foramen ovale under direct visualization: how to avoid complications in trigeminal neuralgia. Laboratory anatomy study. [Cassiano MARCHI](#), [Paulo Henrique PIRES DE AGUIAR](#) (São Paulo, Brazil)
- #26117 - Systematic review: mesencephalotomy for chronic pain. [Paulo Henrique PIRES DE AGUIAR](#) (São Paulo, Brazil), [Giovanna GALAFASSI](#), [André AKIRA TAKAHASHI](#), [Manuela CORRÊA PERES](#), [Paulo Eduardo ZITO RAFFA](#), [Pedro Henrique SIMM PIRES DE AGUIAR](#), [Carolina ANGELI KALAF MUSSI](#), [Raphael Vinícius GONZAGA VIEIRA](#), [Paulo Roberto FRANCESCHINI](#)
- #23940 - TRACTOTOMY OF SPINO THALAMIC BEAM MESENCEPHALIQUE. [Faisal ALKATHERY](#), [Michel LEFRANC](#) (AMIENS), [Johann PELTIER](#)
- #26221 - Trigeminal pain classification revised : the key to neurosurgical management. [Serge RASSKAZOFF](#) (Victoria Island, Nigeria)

## EP10

00:00 - 00:00

EPOSTERS  
PSYCHIATRIC DISORDERS

- #23949 - Biological mechanisms of neurostimulation: An in situ based study comparing deep brain stimulation and optogenetic stimulation of the medial forebrain bundle. [Wen ZHAO](#) (Freiburg, Germany), [Jasmin WEIS](#), [Volker Arnd COENEN](#), [Máté DÖBRÖSSY](#)
- #26032 - Cognitive Outcome after Deep Brain Stimulation for Refractory Obsessive-Compulsive Disorder: a systematic review and case series. [Tim BOUWENS VAN DER VLIS](#) (Maastricht, The Netherlands), [Annelien DUIJS](#), [Megan VAN DE VEERDONK](#), [Anne MULDER](#), [Koen SCHRUERS](#), [Yasin TEMEL](#), [Linda ACKERMANS](#), [Leentjens ALBERT](#)
- #23929 - Deep brain stimulation of the posteromedial hypothalamus including post-hypothalamotomy surgical rescue for severe and intractable aggressive behavior in mentally retarded patients. [Oscar ESCOBAR](#) (Cali, Colombia), [Javier OROZCO](#), [Gabriel ARANGO](#), [Juan SALCEDO](#)
- #24085 - Functional Neurosurgery for Psychiatric Illness in Africa: Challenges and Opportunities. [Ruth Verity PASSCHIER](#) (Cape Town, South Africa)
- #23898 - Incisionless MR-guided focused ultrasound: technical considerations and current approaches in psychiatric disorders. [Thomas KINFE](#) (Erlangen, Germany), [Michael BUCHFELDER](#)
- #23947 - Optogenetic stimulation of VTA dopaminergic neurons in a rodent model of depression. [Yixin TONG](#) (Freiburg, Germany), [Volker Arnd COENEN](#), [Máté DÖBRÖSSY](#)
- #23985 - Preoperative anxiety in patients admitted for brain surgery: a systematic review. [Vittorio OTERI](#), [Anna MARTINELLI](#) (Padova, Italy), [Elisa CRIVELLARO](#), [Francesca GIGLI](#)
- #25944 - RechargePSYCH: Rechargeable implantable pulse generators in patients with deep brain stimulation for psychiatric disorders. [Martin JAKOBS](#) (Heidelberg, Germany), [David Hernán AGUIRRE-PADILLA](#), [Peter GIACOBBE](#), [Andreas UNTERBERG](#), [Andres LOZANO](#)
- #23961 - Reserpine-induced chronic rat model of depression: behavioral and physiological based validation. [Lidia MIGUEL TELEGA](#) (Freiburg im Breisgau, Germany), [Ann-Christin EDER](#), [Philipp Tobias MEYER](#), [Volker Arnd COENEN](#), [Máté DÖBRÖSSY](#)

## EP11

00:00 - 00:00

EPOSTERS  
RADIOSURGERY

- #23893 - Frame-based and mask-based stereotactic radiosurgery: the patient experience, compared. [Matthew PAVLICA](#), [Michael SCHULDER](#) (Lake Success, NY, USA), [Anuj GOENKA](#), [Troy DAWLEY](#)
- #26223 - Gamma Knife radiosurgery for unusual sellar lesions treatment. [Giorgia BULGARELLI](#) (Verona, Italy), [Antonio NICOLATO](#), [Valeria BARRESI](#), [Riccardo LAVEZZO](#), [Emanuele ZIVELONGHI](#), [Paolo Maria POLLONIATO](#), [D'amico ANNA](#), [Carlo CAVEDON](#), [Giuseppe Kenneth RICCIARDI](#), [Giampietro PINNA](#), [Francesco SALA](#), [Michele LONGHI](#)
- #22800 - Hypofractionated Gamma Knife Radiosurgery for Cerebral Arteriovenous Malformations: Preliminary Results. [Mustafa Yavuz SAMANCI](#) (Istanbul, Turkey), [Ali Ihsan ATASOY](#), [Fatih KARAKÖSE](#), [Nülfirer KILIC DURANKUS](#), [Selçuk PEKER](#)
- #23931 - Stereotactic radiosurgery for Solid vs. Cystic Vestibular Schwannoma: Systematic Review and Meta-analysis. [Nima HAMIDI](#) (Glendale, USA), [Elie MASSAAD](#), [Jacalynn GOETZ](#), [Alireza MANSOURI](#)

## EP12

00:00 - 00:00

EPOSTERS  
SPASTICITY

- #24070 - High frequency spinal cord electrostimulation in cerebral palsy. [Andrei SHAPKIN](#) (Tyumen, Russia), [Albert SUFIANOV](#)

# VERCISE GENUS™ DBS SYSTEM

## Control Made Clear

In Partnership with  
 **BRAINLAB**



The Vercise Genus™ DBS System and Vercise DBS Lead-only system before Stimulator is implanted provide safe access to full-body MRI scans when used with specific components and the patient is exposed to the MRI environment under specific conditions defined in the supplemental manual ImageReady™ MRI Guidelines for Boston Scientific DBS Systems.

Results from clinical studies are not predictive of results in other studies. Results in other studies may vary.

The Vercise™ M8 Adapter is a 1 x 8 in-line connector that is designed to connect specific Medtronic® lead extensions to the Boston Scientific DBS System Stimulator, as part of a deep brain stimulation procedure. The Boston Scientific Vercise M8 Adapter is compatible with the following Medtronic Leads: Model 3387 Lead, Model 3389 Lead. The Boston Scientific Vercise M8 Adapter is compatible with the following Medtronic lead extensions Model 3708640 Extension, Model 3708660 Extension, Model 3708695 Extension, Model 3708540, Model 3708560, Model 3708595 Extension.

**CAUTION:** The law restricts this device to sale by or on the order of a physician. Indications, contraindications, warnings, and instructions for use can be found in the product labeling supplied with the device. Information for use only in countries with applicable health authority registrations. Material not intended for use in France. All rights reserved.

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