XXII CONGRESS OF THE EUROPEAN SOCIETY FOR STEREOTACTIC AND FUNCTIONAL NEUROSURGERY

FINAL PROGRAMME

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HOTEL MELIA CASTILLA
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ABOUT THE ESSFN

The European Society for Stereotactic and Functional Neurosurgery (ESSFN) frontiers the progress of functional and stereotactic neurosurgery of the human nervous system. A key mission of the society is to develop and teach functional and stereotactic treatments for neuropsychiatric disorders and to provide a forum for education and communication.

The Society achieves its objectives through:
> Congresses, lectures and practical courses as well as scientific publications
> Personal contacts and close relationships among the members themselves and with physicians and scientists in all specialized fields
> The journal Stereotactic and Functional Neurosurgery: the official journal of ESSFN

The membership of the Society has increased steadily over the past few years, to close to 300 members.

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WEDNESDAY 28 SEPTEMBER

09:00-12:00 **ESSFN OFFICERS MEETING** *EL JARDIN ROOM*

11:00 REGISTRATION OPENING

14:00-16:00 **ESSFN EDUCATIONAL COMMITTEE MEETING** *EL JARDIN ROOM*

16:00-18:30 **PRE-CONGRESS SYMPOSIUM (Details page 28)** *AUDITORIUM*

18:30-19:30 WELCOME RECEPTION *IN THE EXHIBITION AREA*

THURSDAY 29 SEPTEMBER

07:00-08:30 **MEETING OF THE WSSFN COMMITTEE FOR PSYCHIATRIC DISORDERS** *EL JARDIN ROOM*

08:00-10:00 PLENARY SESSION 1 **OPENING CEREMONY AND SPECIAL LECTURES** *AUDITORIUM*

Chairmen : Miguel Manrique Smela (Spain), Yasin Temel (The Netherlands)

> **Opening Address.** ***Damianos Sakas (Greece)***
> **Welcome address.** ***Juan Barcia (Spain)***

SPECIAL LECTURES:

> Unmet needs and future options in the surgical treatment of dystonia. ***Joachim Krauss (Germany)***
> Defining target selection in functional neurosurgery by connectomies. ***Juan Barcia (Spain)***

ORAL COMMUNICATIONS:

01#8457 _ Outcomes of a prospective, multi-center international registry of DBS for Parkinson's disease.
Jan Vesper, Günther Deuschl, Roshini Jain, Nitzan Mekel-Bobrov, Nic Van Dyck, Andrea Kuhn, Gerd-Helge Schneider, Christoph van Riesen, Hubertus Mehdorn, Alfons Schnitzler, Lars Timmermann, Veerle Visser-Vandewalle, Esther Suarez San Martin, Ignacio Regidor, Paul Eldridge, Michele Cavallo Cavallo, Mariachiara Sensi (Germany, Spain, UK, Italy)

02#8597 _ Individualized parcellation of the subthalamic nucleus in patients with Parkinson's disease with 7T MRI.
Yasin Temel, Birgit Plantinga (The Netherlands)

03#7847 _ DBS and Parkinson's disease - two-step strategy.
Diogo Belo, José Pedro Lavrador, Herculano Carvalho, Maria Begoña Cattoni (Portugal)

04#8279 _ An international, randomized, controlled trial of focused ultrasound thalamotomy for essential tremor.
W. Jeff Elias, Michael Schwartz, Pejman Ghanouni, Howard Eisenberg, Ryder Gwinn, Rees Cosgrove, William Ondo, Takaomi Taira, Jin Woo Chang (USA, Canada, Japan, South Korea)

05#8430 _ Prelemniscal radiations fiber composition and DBS induced metabolic activity in Parkinson's disease.
Francisco Velasco Campos, Miguel Angel Avila-Rodriguez, Arturo Avendaño, Luis Concha, Guadalupe Garcia And Mauricio Esqueda (Mexico)

10:00-10:30 *COFFEE BREAK & VISIT OF POSTERS AND EXHIBITION*

10:30-12:00 PLENARY SESSION 2 **PAIN & SPASTICITY** *AUDITORIUM*

Chairmen : Carlos Fernández Carballal (Spain), Marc Sindou (France)

> Spasticity. ***Marc Sindou (France)***
> Peripheral nerve stimulation. ***Konstantin V. Slavin (USA)***
> Surgery for pain. ***Serge Blond (France)***

ORAL COMMUNICATIONS:

06#8765 _ Burst or tonic stimulation? Results of a placebo controlled, double blinded, randomized study for the treatment of FBSS patients – 2y follow-up.
Jan Vesper, Jarek Maciaczyk, Slotty Philipp, Stefan Schu (Germany)

07#8409 _ Peripheral nerve stimulation of brachial plexus nerve root and suprascapular nerve for chronic refractory neuropathic pain of the upper limb pain.
Marie Manfiotto,Bénedicte Bouche, Denys Fontaine, Véronique Dix-Neuf, Jean Lemarié (France)

08#8504 _ Gamma Knife radiosurgery for glossopharyngeal neuralgia: a bicentric experience of 21 patients.
Pierre-Yves Borius, Constantin Tuleasca, Xavier Muraciol, Luis Schiappacasse, Antoine Dorenlot, Michele Zeverino, Anne Donnet, Marc Levivier, Jean Regis (France, Switzerland)

12:00-13:30 *LUNCH BREAK*
LUNCH WORKSHOP (Details page 28) *HIDALGO ROOM*

ESSFN EXECUTIVE COMMITTEE LUNCH MEETING *EL JARDIN ROOM*

13:30-15:00 PLENARY SESSION 3 **PAIN & SCIENCE** *AUDITORIUM*

Chairmen : Francisco Robaina (Spain), Serge Blond (France), Philippe De Vloo (Belgium)

> DBS for pain. ***Tipu Aziz (UK)***
> Spinal cord stimulation for rehabilitation. ***Grégoire Courtine (Switzerland)***

ORAL COMMUNICATIONS:

09#8616 _ Long-term Effects of Third Ventricle Deep Brain Stimulation in Cluster Headache.
Sarah Giulia Mariani, Lannie Liu, Eric Seigneuret, Alexandre Krainik, Pierric Giraud, Alim Louis Benabid, Stephan Chabardès (France)

010#8467 _ Electrode tip localization in rats using various CT imaging techniques and BlockFace is accurate, fast and cheap as compared to histology.
Philippe De Vloo, Janaki Raman Rangarajan, Kelly Luyck, Marjolijn Deprez, Laura Luyten, Johannes van Loon, Frederik Maes, Bart Nuttin (Belgium)

011#8587 _ Laser Doppler Flowmetry Guidance during Stereotactic Neurosurgery: A Review of Safety Aspects.
Karin Wårdell, Simone Hemm-Ode, Peter Zsigmond (Sweden, Switzerland)

012#8303 _ Noninvasive neuromodulation and brain mapping with low intensity focused ultrasound.
W. Jeff Elias, Robert Dallapiazza, Kelsie Timbie,Stephen Holmberg, Jeremy Gatesman, Maria Beatriz Lopes, Richard Price, Wilson Miller (USA)

013#8512 _ Fornix deep brain stimulation induced long-term spatial memory independent of hippocampal neurogenesis.
Ali Jahanshahi, Sarah Hescham, Yasin Temel (The Netherlands)

15:00-16:30 PLENARY SESSION 4 **PAIN** *AUDITORIUM*

Chairmen : Jaime Broseta (Spain), Constantin Slavin (USA), Pawel Sokal (Poland)

> Radiosurgery for trigeminal neuralgia. ***Kita Sallabanda (Spain)***
> Spinal cord stimulation for pain: an update. ***Francisco Robaína (Spain)***

ORAL COMMUNICATIONS:

014#8545 _ Medial gamma-thalamotomy for intractable pain.
Dusan Urgosik, Roman Liscak (Czech Republic)

015#8555 _ A multimodal neurophysiologial approach to intraoperative monitoring for dorsal root entry zone (DREZ) lesioning for neuropathic deafferentiation pain after brachial plexus avulsion injury.
Kantharuby Tambirajoo, Michael Pridgeon, Beverley Haworth, Jon Ellenbogen, Radhika Manohar, Patricia Byrne, Jibril Osman-Farah, Paul Eldridge (UK)

016#8568 _ Longterm follow-up of bifocal thalamic deep brain stimulation for treatment of chronic neuropathic pain.
Mahmoud Abdallat, Joachim Kurt Krauss, Andreas Wloch (Germany)

017#8592 _ Tibial nerve stimulation with a miniature wireless stimulator in chronic peripheral pain.
Pawel Sokal, Marek Harat, Sara Kieronska, Piotr Zielinski (Poland)

018#8601 _ Outcome after microvascular decompression for trigeminal neuralgia due to venous neurovascular conflicts: in a series of consecutive patients.
Andrei Brinzeu, Chloe Dumot, Marc Sindou (France)

16:30-17:00 *COFFEE BREAK & VISIT OF POSTERS AND EXHIBITION*

17:00-18:30 PARALLEL SESSION 1 **MOVEMENT DISORDERS** *AUDITORIUM*

Chairmen: Pedro Roldán Badia (Spain), François Alesch (Austria)

ORAL COMMUNICATIONS:

019#8438 _ The effect of unilateral thalamic deep brain stimulation on the vocal dysfunction of a patient with spasmodic dysphonia: interrogating cerebellar and pallidal neural circuits.
Anujan Poologaindran, Zurab Ivanishvili, Murray Morrison, Linda Rammage, Mini Sandhu, Nancy Polyhronopoulos, Christopher Honey (Canada)

020#8456 _ A comparison of outcomes between Deep Brain Stimulation (DBS) under general anesthesia versus conscious sedation with awake evaluation.
François Alesch, Roshini Jain, Lilly Chen, Thomas Brücke, Fernando Seijo, Esther Suarez San Martin, Claire Haegelen, Marc Verin, Mohammed Maarouf, Michael T. Barbe, Steven Gill, Alan Whone, Mauro Porta, Domenico Servello, Lars Timmermann (Austria, USA, Spain, UK, Germany, Italy)

021#8461 _ The High Cervical Spinal Cord Stimulation (HCSCS) may improve the motor symptoms in Parkinson's Disease.
Paolo Mazzone, Fabio Viselli, Stefano Ferraina, Massimo Marano, Eugenio Scarnati (Italy)

022#8472 _ Once DBS, always DBS? - clinical, ethical, and financial considerations related to DBS.
Marwan Hariz (UK)

023#8510 _ Safety of STN Gamma Knife Radiosurgery for Parkinson's Disease : Preliminary Results of a Prospective Study.
Jean Régis, Romain Carron, Nathalie Semeriva, Louise Merly, Tatiana Witjas (France)

024#8522 _ Three year outcomes of a prospective, multi-center trial evaluating Deep Brain Stimulation with a new multiple-source, constant-current rechargeable system in Parkinson's disease.
Roshini Jain, Lars Timmermann, Lilly Chen, Thomas Brücke, Fernando Seijo, Esther Suarez San Martin, Veerle Visser-Vandewalle, Michael T. Barbe, Steven Gill, Alan Whone, Mauro Porta, Domenico Servello, François Alesch (Austria, USA, Spain, UK, Germany, Italy)

FLASH COMMUNICATIONS :

F1#8536 _ Relating active contact localization in STN DBS to long-term motor symptom outcome; medial border of STN as new anatomical reference point.
Maarten Bot, Vincent Odekerken, Maria Fiorella Contarino, Rob de Bie, Rick Schuurman, Pepijn van den Munckhof (The Netherlands)

F2#8546 _ Preliminary experience with chronic directional DBS in the STN.
Claudio Pollo, Julia Müllner, Markus Oertel, Ines Debove, Michael Schüpbach, Frédéric Rossi (Switzerland)

F3#8565 _ Long-Term Efficacy of Constant Current Deep Brain Stimulation in Essential Tremor.
Ali Rezaei Haddad, Keyoumars Ashkan, Michael Samuel (UK)

F4#8582 _ The effect of amantadine on the dose of levodopa required after deep brain stimulation for Parkinson's disease.
Ahmed Bakr, Hardev Pall, Payam Ghoddousi, Hayley Garratt, Anwen White, Ismail Ughratdar, Rosalind Mitchell, Jamilla Kausar (UK)

F5#8594 _ Deep brain stimulation changes iron metabolism in patients with Parkinson's disease.
Pawel Sokal, Marcin Rudas, Marek Harat, Piotr Zielinski, Marcin Rusinek (Poland)

17:00-18:30 PARALLEL SESSION 2 **EPILEPSY** *HIDALGO ROOM*

Chairmen: Miguel Gelabert (Spain), Dirk Van Roost (Spain)

ORAL COMMUNICATIONS :

025#7907 _ SEEG-guided radiofrequency thermocoagulation (SEEG RF-TC): from in vitro and in vivo data to technical guidlines.
Pierre Bourdillon, Jean Isnard, Hélène Catenoix, Alexandra Montavont, Sylvain Rheims, Karine Ostowsky, Philippe Ryvlin, François Mauguiere, Marc Guénot (France, Switzerland)

026#8520 _ Deep brain stimulation for refractory epilepsy: do firing patterns in the anterior nucleus of thalamus relate to therapy response?
Frédéric LWVJ Schaper, Yan Zhao, Louis Wagner, Albert J Colon, Vivianne HJM van Kranen-Mastenbroek, Danny MW Hilkman, Erik D Gommer, Marielle CG Vlooswijk, Markus LF Janssen, Linda Ackermans, Govert Hoogland, Richard van Wezel, Paul A Boon, Tjitske C Heida, Rob PW Rouhl, Yasin Temel (The Netherlands)

OF7#7988 _ SEEG guided radiofrequency-thermocoagulation: a potential method for pre-resection minimal invasive therapy.
Ciurea Jean, Barborica Andrei, Rasina Alin, Gheorghiu Ana, Mandrutza Ioana, Popa Irina, Maliia Mihai Dragos, Ene Sabina, Donos Cristi (Romania)

OF8#8431 _ Methodology, outcome, safety and in vivo accuracy in traditional frame-based stereoelectroencephalography.
Pieter Kubben, Lars Van der Loo, Olaf Schijns, Govert Hoogland, Albert Colon, Louis Wagner, Jim Dings (The Netherlands)

OF9#8476 _ Subcortical band heterotopia. Results from two cases submitted to anterior nuclei of the thalamus stimulation.
Alexandre Rainha Campos, Ana Franco, José Pimentel, Carlos Morgado, Sara Pinelo, António Gonçalves-Ferreira, Carla Bentes (Portugal)

OF10#8528 _ Subfrontal selective amygdala-hippocampectomy via a supraorbital craniotomy: long-term follow-up of two patients.
Martin Glaser, Wolfgang Wagner, Peter Grunert (Germany)

FLASH COMMUNICATIONS:

F11#8558 _ Invasive intracranial monitoring and surgical resections in medially refractory epilepsy: outcomes and complications.
Kantharuby Tambirajoo, Paul Eldridge, Radhika Manohar, Jibril Osman-Farah (UK)

F12#8572 _ Deep Brain Stimulation (DBS) for medically refractory epilepsy: single center experience and clinical outcomes.
Kantharuby Tambirajoo, Andrew Nicolson, Jacqui Vinten, Jibril Osman-Farah, Paul Eldridge (UK)

F13#8613 _ Integration of Multimodal Diagnostic Studies (MRI, fMRI, DTI, EEG) and Visualization of the Result to Aid the planning of Epilepsy Surgeries.
László Entz, László Halász, Kozák Lajos R., Péter Barsi, Dániel Fabó, Loránd Eross (Hungary)

F14#8806 _ Stereo-electroencephalography using magnetic resonance angiography for avascular trajectory planning.
Krasimir Minkin, Kaloyan Gabrovski, Marin Penkov, Petya Dimova (Bulgaria)

17:00-18:30 PARALLEL SESSION 3 **OTHERS I** *TAPICES ROOM*

Chairmen : Kita Sallabanda (Spain), Marc Levivier (Switzerland), Miroslav Galanda (Slovakia)

SPASTICITY

ORAL COMMUNICATIONS :

027#8862 _ Selective monitorized Neurectomy in combination with electrical peroneal nerve stimulation for treatmnent of drop foot syndrome and complicated spasticity in stroke patinets.
Frank Hertel, Jose Pereira, Frederic Chantraine, Florent Moissenet, Thiery Debugne, Elisabeth Kolanowski (Luxembourg)

028#8898 _ Stereotactic cerebellar stimulation -past-present-future.
Miroslav Galanda, Tomas Galanda, Peter Jombik, Jana Mistinova (Slovakia, Slovenia)

FLASH COMMUNICATIONS:

F15#8316 _ The role of volume in the effectiveness of intrathecal baclofen. First clinical signs of a saturation point?
Apostolos Chatzikalfas, Athanasios Koulousakis, George Matis, Veerle Visser-Vandewalle (Germany)

F16#8540 _ Spinal cord stimulation and chronic intrathecal baclofen therapy in the treatment of drug-resistant forms of spasticity in patients after spinal cord injury.
Ruslan Totorkulov, Artur Biktimirov, Oleg Pak, Pavel Kalinsky (Russia)

EPILEPSY :

ORAL COMMUNICATION:

029#8845 _ DBS of ANT for Epilepsy - The Lisbon Experience.

Alexandre Rainha Campos, António Gonçalves-Ferreira, Ana Franco, Lara Caeiro, Ana Rita Peralta, Carla Bentes, José (Portugal)

FLASH COMMUNICATION :

F17#8878 _ How does vagal nerve stimulation alter functional connectivity ? Study based on intracerebral recordings and comparison between "on" and "off" stimulation periods.

Romain Carron, Elsa Vidal, Giorgio Spatola, Francesca Bonini, Jean Régis, Fabrice Bartolomei (France)

MOVEMENT DISORDERS :

ORAL COMMUNICATION :

030#8803 _ Microvascular decompression for HELPS Syndrome: a novel cranial neuropathy.

Christopher Honey, Anujan Poologaindran, Murray Morrison, Zurab Ivanishvili (Canada)

FLASH COMMUNICATION :

F18#8539 _ An economic evaluation of deep brain stimulation for patients with Tourette's syndrome: An initial exploration.

David Rowell, Thi Hai Tho Dang, Jacki Liddle, Terry Coyne, Peter Silburn, Luke Connelly (Australia)

EXPERIMENTAL:

FLASH COMMUNICATIONS:

F19# 8801 _ Acute Fornix DBS induces long-term depression of hippocampal synaptophysin levels.

Majed Aldehri, Yasin Temel, Ali Jahanshahi, Sarah Hescham (The Netherlands)

F20#8570 _ A co-manipulation robotic system for brain biopsies.

Pedro Roios, Pedro Batista, Inês Machado, Jorge Martins, Herculano Carvalho (Portugal)

F21#8608 _ Endo ventricular deep brain stimulation of the ventro-median hypothalamus as a rescue treatment in an obese patient carrying a heterozygous mutation in the POMC gene.

Stephan Chabardès, Karine Clement, Manuella Oddoux, Anne Laure Borel, Napoleon Torres, Alim Louis Benabid (France)

F22#8571 _ Deep brain stimulation of the central auditory pathway suppresses tinnitus in rats.

Gusta van Zwieten, Jasper V Smit, Markus LF Janssen, Milaine Roet, Yasin Temel, Robert J Stokroos, Ali Jahanshahi (The Netherlands)

08:30-10:00 PLENARY SESSION 5 **EXPERIMENTAL** *AUDITORIUM*

Chairmen: Jesús Pastor (Spain), Joachim Krauss (Germany)

> Cell therapy in Parkinson's disease. ***Jocelyne Bloch (Switzerland)***

ORAL COMMUNICATIONS :

031#8588 _ Effects stimulation in the nucleus entopeduncularis on neuronal network activity after apomorphine-induced deficient sensorimotor gating in a rat model.
Kerstin Schwabe, Mesbah Alam, Joachim K. Krauss (Germany)

032#8590 _ The Centromedian-Parafascicular Complex may signal behaviorally relevant events during auditory processing.
Kerstin Schwabe, Anne-Kathrin Beck, Götz Lütjens, Mahmoud Abdallat, Pascale Sandmann, Reinhard Dengler, Joachim K. Krauss (Germany)

033#8795 _ Neuronal firing activity in the basal ganglia after striatal transplantation of dopamine neurons in hemiparkinsonian rats.
Kerstin Schwabe, Regina Rumpel, Mesbah Alam, Lisa M. Schwarz, Joachim K. Krauss, Andreas Ratzka, Claudia Grothe (Germany)

034#8857 _ Behavioral and histological impact of bilateral high frequency stimulation of the medial forebrain bundle following partial dopamine lesions in a rodent model of depression.
Máté Döbrössy, Stephanie Thiele, Lisa Selesnew, Luciano Furlanetti, Volker A. Coenen (Germany)

035#8859 _ Bilateral High Frequency Stimulation of the medial forebrain bundle in the Flinders Sensitive Line rodent model of depression.
Stephanie Thiele, Lisa Selesnew, Markus Cremer, Jasmin Weis, Volker A. Coenen, Máté (Germany)

036#8886 _ A novel method for stereotactic implantation neurosurgery based on individual rat coordinates derived from preoperative CT imaging coregistered to a stereotactic MR atlas.
Philippe De Vloo, Janaki Raman Rangarajan, Kelly Luyck, Marjolijn Deprez, Johannes van Loon, Frederik Maes, Bart Nuttin (Belgium)

037#8508 _ Motor cortex stimulation does not lead to functional recovery after experimental cortical injury in rats.
Ali Jahanshahi, Lisa-Maria Schonfeld, Sven Hendrix, Yasin Temel (The Netherlands, Belgium)

10:00-10:30 *COFFEE BREAK & VISIT OF POSTERS AND EXHIBITION*

10:30-12:00 PLENARY SESSION 6 **EPILEPSY** *AUDITORIUM*

Chairmen: Eduardo García Navarrete (Spain), David Roberts (USA)

> Epilepsy network. ***Viktor Jirsa (France)***
> Surgical management of epilepsy. ***David Roberts (USA)***
> Preoperative evaluation in surgery for epilepsy. ***Julio Albisua (Spain)***

ORAL COMMUNICATIONS :

038#8434 _ Deep brain stimulation in subiculum for mesial temporal lobe epilepsy.
Gustavo Aguado Carrillo, Daruni Vázquez Barrón, Ana Luisa Velasco Monroy, Francisco Velasco Campos, Manola Cuellar Herrera (Mexico)

039#8485 _ The Surgical approach to the anterior nucleus of thalamus in patients with refractory epilepsy: Experience from the European multicenter registry (MORE).
Kai Lehtimäki, Volker A. Coenen, Antonio Gonçalves-Ferreira, Paul Boon, Christian Elger, Rod S Taylor, Philippe Ryvlin, Antonio Gil-Nagel, Frans Gielen, Thomas Brionne, Abdallah Abouihia, Grégory Beth (Finland, Germany, Portugal, Belgium, UK, Switzerland, The Netherlands)

040#8491 _ Optimization of the stimulation site improves outcome after deep brain stimulation of the anterior nucleus of thalamus in refractory epilepsy.
Kai Lehtimäki, Timo Möttönen, Joonas Haapasalo, Timo Tähtinen, Juha Öhman, Jani Katisko, Kaija Järventausta, Jukka Peltola (Finland)

12:00-13:30 *LUNCH BREAK*

LUNCH WORKSHOP (Details page 28) *HIDALGO ROOM*

LUNCH WORKSHOP (Details page 28) *TAPICES ROOM*

LUNCH WORKSHOP (Details page 28) *PRADO ROOM*

WSSFN BOARD MEETING *EL JARDIN ROOM*

13:30-15:00 PLENARY SESSION 7 **SURGERY FOR MOVEMENT DISORDERS AN UPDATE** *AUDITORIUM*

Chairmen : Marta del Alamo (Spain), Stephan Chabardes (France)

> Closed loop DBS check. ***Peter Brown (UK)***
> Role of radiosurgery in movement disorders. ***Jean Régis (France)***
> The role of LFP recordings in Parkinson's disease surgery. ***Jorge Guridi (Spain)***

041#8533 _ Overlapping of patient-specific models of DBS and tractography-based target correlated to motor improvement in patients with Parkinson's disease.
Josue Avecillas-Chasin, Juan A Barcia (Spain)

042#8537 _ DBS for Essential Tremor : aligning thalamic and subthalamic targets in one surgical trajectory.
Maarten Bot, Fleur Rootselaar, Maria Fiorella Contarino, Rob de Bie, Rick Schuurman, Pepijn van den Munckhof (The Netherlands)

043#8541 _ Subthalamic local field potentials recorded with bipolar electrodes as an alternative to microrecording.
Zvi Israel, Odeya Marmor, Dan Valsky, Matti Joshua, Atira Bick, David Arkadir, Idit Tamir, Hagai Bergman, Renana Eitan (Israel)

15:00-16:40 PARALLEL SESSION 4 **MOVEMENT DISORDERS** *AUDITORIUM*

Chairmen : Juan Alberdi Viñas (Spain), Miroslav Galanda (Slovakia)

ORAL COMMUNICATIONS :

044#8524 _ Spinal cord stimulation improves gait in patients with Parkinson's disease previously treated with subthalamic nucleus Deep Brain Stimulation.
Fonoff Erich, Carolina Pinto de Souza, Hamani Clement, Carolina Souza de Oliveira, Dos Santos Ghilardi Maria Gabriela, Cury Rubens Gisbert, Barbosa Egberto Reis, Jacobsen Teixeira Manoel (Brazil)

045#8445 _ Stereotactic lesional interventions for Parkinson's disease: an experience of 465 patients.
Kostiantyn Kostiuk, Yurii Medvedev, Andrii Popov, Maksim Shevelov, Valeriy Cheburakhin, Vasyliv Nazar, Victor Lomadze, Sergei Dichko (Ukraine)

046#8544 _ Changing the target after unsatisfactory outcome of deep brain stimulation in advanced Parkinson's disease: cases from the NSTAPS trial and review of literature.
Rick Schuurman, Vincent Odekerken, Pepijn van den Munckhof, Rob de Bie (The Netherlands)

047#8559 _ Subthalamic deep brain stimulation (DBS) surgery under general anaesthesia (GA) and neurophysiological guidance while on dopaminergic medications: Prospective comparative cohort study.
Mohammed J. Asha, Benjamin Fihser, Jamilla Kausar, Hayley Garratt, Hari Krovvidi, Colin Shirley, Anwen White, Ramesh Chelvarajah, Ismail Ughratdar, James A Hodson, Hardev Pall, Rosalind D Mitchell (UK)

OF23#8612 _ Bilateral pallidal deep brain stimulation versus bilateral pallidotomy in the management of secondary postanoxic generalized dystonia, A comparative study.
Zeiad Fayed, Alia Alia Mansour (Egypt)

OF24#8424 _ Characterizing the micro-lesion effect due to intraoperative microelectrode recording on motor symptoms in patients with Parkinson's Disease undergoing deep brain stimulation of the subthalamic nucleus.
Ersoy Kocabicak, Dursun Aygun, Onur Yildiz, Yasin Temel (Turkey, The Netherlands)

OF25#8452 _ Deep brain stimulation of the globus pallidus internus in patients with chorea-dominant Huntington's Disease.
Ersoy Kocabicak, Dursun Aygun, Onur Yildiz, Onder Taskin, Onur Alptekin, Yasin Temel (Turkey, The Netherlands)

OF26#8458 _ Real world clinical outcomes using a novel directional lead from a multicenter registry of DBS for Parkinson's disease.
Jan Vesper, Günther Deuschl, Roshini Jain, Nitzan Mekel-Bobrov, Nic Van Dyck, Andrea Kuhn, Gerd-Helge Schneider, Lars Timmermann, Veerle Visser-Vandewalle, James Fitzgerald, Monika Pötter-Nerger, Jens Volkmann (Germany, UK)

FLASH COMMUNICATIONS :
F27#8490 _ Directional leads in dbs: a recent reliable concept to improve follow-up in implanted patients. preliminary experience.
Massimo Mondani, Roberto Eleopra, Stanislao D'Auria, Sara Rinaldo, Christian Lettieri, Miran Skrap (Italy)

F28#8495 _ Is it worthwhile to perform Deep Brain Stimulation in Primary Generalized Dystonia during the childhood? A bibliographic review.
Javier Perez, Patricia Barrio, Marta Navas, Cristina Torres, Martina Messing-Jünger, Rafael García de Sola (Spain)

F29#8498 _ Surgical replacement of Implantable Pulse Generators in Deep Brain Stimulation: adverse events and risk factors in a multicenter cohort.
Anders Fytagoridis, Tomas Heard, Jennifer Smauelsson, Peter Zsigmond, Elena Jiltsova, Simon Skyrman, Thomas Skoglund, Terry Coyne, Peter Silburn, Patric Blomstedt (Australia, Sweden)

F30#8517 _ Gamma Knife VIM thalamotomy with focus on patient selection, targeting and complications.
Irina Zubatkina, Pavel Ivanov (Russia)

15:00-16:40 PARALLEL SESSION 5 **RADIOSURGERY** *HIDALGO ROOM*

Chairmen : Roberto Marinez-Alvarez (Spain), Romain Carron (France)

> Long term results of Gamma Knife Radiosurgery for the treatment of trigeminal neuralgia. ***Roberto Martinez-Alvarez (Spain)***

ORAL COMMUNICATIONS
048#8453 _ Stereotactic destruction of deep cerebral gliomas: a cryosurgery method.
Andrei Kholiavin, Boris Martynov, Vladimdr Nizkovolos, Alexander Gurchin (Russia)

049#8515 _ Raising quality through implementation of a robust external credentialing program for SRS and SBRT: Novalis Certification Experience.
Isabelle Germano, Deborah Benzil, James Robar, Timothy Soldberg (USA, Canada)

050#8814 _ Stereotactic body radiotherapy (sbrt) in spine metastases.
Escarlata López, Gregorio Arregui, Antonio Lazo, Joaquin Gómez, Antonio Sacchetti, Daniel Rivas (Spain)

051#8813 _ Brain metastases treated with frameless radiosurgery.
Escarlata López, Daniel Rivas, Gregorio Arregui, Antonio Lazo, Joaquin Gómez, Antonio Sacchetti (Spain)

052#8415 _ Gamma knife radiosurgery for secondary trigeminal neuralgia associated with benign tumors and the retrogasserian trigeminal nerve target.
Park Seong-Cheol, Jung Kyo Lee, Do Hee Lee (South Korea)

053#8451 _ MRI guided High Intensity Focused Ultrasound for the treatment of essential tremor : clinical outcome and radiological findings of unilateral thalamotomy.
Marta Del Álamo de Pedro, Raul Martinez, Jose Angel Pineda, Rafael Rodriguez, Ignacio Obeso, Lidia Vela, Obeso Jose (Spain)

054#8825 _ Gammaknife thalamotomy for tremor : Neuro-imaging response variability at one year follow-up in a cohort of 169 consecutive patients.
Romain Carron, Tatiana Witjas, Giorgio Spatola, Michel Lefranc, Constantin Tuleasca, Cornel Tancu, Jean Régis (France)

055#8758 _ Treatment of medical resistant OCD by Gamma Knife Radiosurgery.
Roberto Martinez-Alvarez (Spain)

15:00-16:40 PARALLEL SESSION 6 **OTHER II** *TAPICES ROOM*

Chairmen : Jan Vesper (Germany), Kai Lehtimäki (Finland)

PAIN

ORAL COMMUNICATIONS :

056#8767 _ Technical aspects of SPG stimulation for Cluster Headache: a new frontier in Neuromodulation.
Vesper Jan, Slotty Philipp, Thomas Klenzner (Germany)

057#8763 _ Cervical and high-thoracic dorsal root ganglion stimulation (DRG) in chronic pain.
Vesper Jan, Jarek Maciaczyk, Stefan Schu, Slotty Philipp (Germany)

058#8609 _ Intrathecal ziconotide for the treatment of sever chronic refractory neuropathic pain due to spinal cord lesions.
Andrei Brinzeu, Patrick Mertens, Helene Staquet (France)

FLASH COMMUNICATIONS :

F31#8389 _ New neuromodulation system for peripheral nerve stimulation: Efficacy on pain and mental status.
Alessandro Dario, Gianni Baldeschi, Giuliano DeCarolis, Nicola Luxardo, Paola Nosella, Massimo Natale, Alfonso Papa, Massimiliano Raggi, Claudio Reverberi (Italy)

F32#8404 _ Occipital nerve stimulation improves the global health status in medically-intractable chronic cluster headache.
Denys Fontaine, Serge Blond, Jean Regis, Stéphane Derrey, Bechir Jarraya, Stephan Chabardes, Jimmy Voirin, Jocelyne Bloch, Sophie Colnat-Coulbois, Francois Caire, Michel Lanteri-Minet (France)

F33#8466 _ Deep brain stimulation targeting the thalamic cavity wall in a rat model for thalamic syndrome.
Philippe De Vloo, Els Crijns, Janaki Raman Rangarajan, Kris van Kuyck, Alexander Bertrand, Bart Nuttin (Belgium)

F34#8566 _ rTMS therapy on M1 modifies the motor map in chronic neuropathic facial pain - a pilot study.
Laura Säisänen, Jelena Hyppönen, Elisa Kallioniemi, Esa Mervaala, Jukka Huttunen, Mikael Fraunberg (Finland)

PSYCHIATRIC DISORDERS:

ORAL COMMUNICATIONS:

059#8534 _ The proper target for OCD DBS is individualized for each patient along the striatum depending on the content of the obsessions.
Juan A Barcia, Josue Avecillas-Chasin, Cristina Nombela, Jose Pineda, Bryan Strange (Spain)

060#8863 _ Diffusion tensor magnetic resonance imaging tractographic analysis of slMFB DBS in major depression.
Volker Arnd Coenen, Thomas Eduard Schlaepfer, Bettina H Bewernick, Jan Bostroem, Horst Urbach, Elke Hattingen, Meng Li (Germany)

FLASH COMMUNICATION :

F35#8488 _ Experience with anterior capsulotomy in obsessive-compulsive disorder.
Dusan Urgosik, Lenka Kramska, Roman Liscak, Jaroslava Skopova (Czech Republic)

ONCOLOGY

ORAL COMMMUNICATION :

061#8535 _ Extended glioma resection by prehabilitation induced plasticity.
Juan A Barcia, Josue Avecillas-Chasin, Paola Rivera, Marcos Rios Lago (Spain)

FLASH COMMUNICATION :

F36#8584 _ A Multipurpose Guidance Probe for Stereotactic Biopsy Procedures.
Karin Wårdell, Neda Haj-Hosseini, Peter Milos, Johan Richter, Martin Hallbeck (Sweden)

16:40-17:10 *COFFEE BREAK & VISIT OF POSTERS AND EXHIBITION*

17:10-18:40 **ESSFN GENERAL ASSEMBLY** *AUDITORIUM*

20:00 **CONGRESS DINNER**

08:30-09:40 PLENARY SESSION 8 **SURGERY FOR PSYCHIATRIC DISORDERS AN UPDATE** *AUDITORIUM*

Chairmen : Bartolomé Oliver Abadal (Spain), Marwan Hariz (UK)

> Brain Rewarding circuits. ***Antonio Gonçalves-Ferreira (Portugal)***
> DBS for aggressiveness. ***Bryan Strange (Spain)***

ORAL COMMMUNICATIONS:

062#8015 _ Using simultaneous DBS/EEG recordings to understand the circuitry underlying neuropsychiatric disorders.
Rowshanak Hashemiyoon, Noe Prins, Ana Coito, Miralena Tomescu, Thomas Schüller, Elena Sildatke, Jens Kuhn, Veerle Visser-Vandewalle, Christoph Michel (Germany, Switzerland)

063#8040 _ Thalamic deep brain stimulation for refractory tourette syndrome: clinical evidence for increasing disbalance of therapeutic effects and side effects at long-term follow-up.
Linda Ackermans, Anouk Smeets, Annelien Duits, Albert Leentjens, Koen Schruers, Vivianne van Kranen-Mastenbroek, Veerle Visser-Vandewalle, Yasin Temel, (The Netherlands)

064#8744 _ Neuropsychological outcome in subthalamic nucleus stimulation surgeries with electrodes passing through the caudate nucleus.
Cihan Isler, Angela Albi, Yasin Temel, Annelien Duits (Turkey, The Netherlands)

09:40-10:10 *COFFEE BREAK & VISIT OF POSTERS AND EXHIBITION*

10:10-11:40 PARALLEL SESSION 7 **IMAGING** *AUDITORIUM*

Chairmen : Julio Albisua (Spain), Hodaie Mojgan (Canada), Harith Akram (UK)

ORAL COMMUNICATIONS:

065#8591 _ How does surface registration influence position and orientation errors in neuronavigation procedures?
Pedro Duarte Batista, Inês Prata Machado, Pedro Roios, José Pedro Lavrador, Maria Begoña Cattoni, Jorge Martins, Herculano Carvalho (Portugal)

066#8426 _ Adaptive deep brain stimulation in Parkinson's disease, first results.
Etienne Pralong, Robert Leeb, Aleksander Sobolewski, Iturrate Inaki, Chavarriaga Ricardo, Peciu-Florianu Iulia, Vingerhoets Francois, Bloch Jocelyne, Millan Jose (Switzerland)

067#8446 _ Targeting accuracy of the subthalamic nucleus in DBS surgery: comparison between 3T MRI and microelectrode recording results.
Andreas Nowacki, Michael Fiechter, Markus Oertel, Ines Debove, Michael Schüpbach, Claudio Pollo (Switzerland)

068#8523 _ DBS Electrode Implantation of the Posterior Subthalamic Area for Treatment of Essential Tremor: proposal of MRI-based anatomical landmarks.
Janine Ai-Schlaeppi, Andreas Nowacki, Frédéric Rossi, Ines Debove, Markus Oertel, Michael Schüpbach, Claudio Pollo (Switzerland)

069#8543 _ Short-term intensive neurofeedback training using realtime fMRI in pre-operative Parkinson's disease patients.
Jinendra Ekanayake, Marina Papoutsi, Joerg Magerkurth, Oliver Josephs, Catherine Milbao, Marjan Jahanshahi, Patricia Limousin, Tom Foltynie, Geraint Rees, Iudvic Zrinzo (UK)

070#8553 _ Subthalamic nucleus deep brain stimulation in Parkinson's disease: local efficacy regions and the influence of cortical connectivity.
Harith Akram, Stamatios Sotiropoulos, Saad Jbabdi, Philipp Mahlknecht, Dejan Georgiev, Jonathan Hyam, Thomas Foltynie, Patricia Limousin, Enrico De Vita, Marjan Jahanshahi, Marwan Hariz, John Ashburner, Timothy Behrens, Ludvic Zrinzo (UK)

071#8610 _ Functional connectivity of the subthalamic nucleus: the role of probabilistic tractography in deep brain stimulation for Parkinson's disease.
László Halász, Dávid Kis, László Entz, Gertrúd Tamás, Dániel Fabó, Péter Klivényi, Loránd Eross (Hungary)

072#8627 _ A stepwise algorithm for tractography-based targeting in movement disorder surger.
Mojgan Hodaie, Francesco Sammartino, Vibhor Krishna, Nicolas Kon Kam King, Andres M Lozano (Canada, USA)

FLASH COMMUNICATIONS

F37#8496 _ Fiber tractography and brain atlas integration in stereotactic planning: improving interactivity with multithreaded and cuda-based solutions.
Ferenc Pongrácz, Péter Szloboda, István Valálik (Hungary)

F38#8887 _ Diffusion tensor imaging tractography assisted direct targeting of the cerebello-thalamo-cortical network for deep brain stimulation in tremor - surgical strategy and intra-operative effects.
Volker Arnd Coenen, Thomas Prokop, Niels Allert, Bastian Sajonz, Burkhard Maedler, Horst Urbach, Peter Christoph Reinacher (Germany)

10:10-11:50 PARALLEL SESSION 8 **PSYCHIATRIC DISORDERS** *HIDALGO ROOM*

Chairmen : Cristina Torres Diaz (Spain), Bart Nuttin (Belgium)

ORAL COMMUNICATIONS :

073#8860 _ Deep brain stimulation (DBS) of the superolateral branch of the medial forebrain bundle (slMFB) in psychiatric disorders - surgical technique.
Volker Arnd Coenen, Thomas Eduard Schlaepfer, Bettina H Bewernick, Jan Bostroem, Peter Christoph Reinacher, Susanne Greschus, Horst Urbach, Burkhard Maedler (Germany)

074#8864 _ A sham-controlled study of Deep Brain Stimulation to the superolateral Medial Forebrain Bundle (slMFB DBS) for treatment-resistant depression.
Volker Arnd Coenen, Bettina H Bewernick, Alena Braeuer, Jan Bostroem, Horst Urbach, Thomas Eduard Schlaepfer (Germany)

075#8554 _ Deep brain stimulation of the internal capsule / nucleus accumbens for obsessive-compulsive disorder: where is the best target?
Pablo Andrade, Juan Baldermann, Kohl Sina, Kuhn Jens, Veerle Visser-Vandewalle (Germany)

076#8557 _ Development and Implementation of a WSSFN Psychiatric Neurosurgery Committee Lesion Registry.
Keith Matthews, Sameer A. Sheth (UK, USA)

077#8489 _ Chronic DBS stimulation of minimally conscious state: methodological issues.
Jean-Jacques Lemaire, Benedicte Pontier, Anna Sontheimer, Fabien Feschet, Jérome Coste, Hachemi Nezzar, Emamnuel De Schilchting, Jacques Luaute, Thierry Sarraf, Catherine Sarret, Guillaume Coll, Sarah, Dominique Rosenberg, Jean Gabrillargues (France)

078#8781 _ EEG resting-state functional connectivity abnormalities in patients with obsessive-compulsive disorder.
Katsushige Watanabe, Ayako Isoo, Yasushi Okamura, Hiromi Kamo, Makoto Taniguchi (Japan)

079#8819 _ A randomised controlled trial of deep brain stimulation in obsessive compulsive disorder: A comparison of ventral capsule/ventral striatum and subthalamic nucleus targets.
Himanshu Tyagi, Ludvic Zrinzo, Harith Akram, Annemieke Apergis-Schoute, Lynne Drummond, Naomi Fineberg, Thomas Foltynie, Marjan Jahanshahi, Patricia Limousin, Keith Matthews, Trevor Robbins, John Rothwell, Diane Ruge, Barbara Sahakian, Marwan Hariz, Eileen Joyce (UK)

080#8865 _ Deep Brain Stimulation to the superolateral Medial Forebrain Bundle for severe, chronic treatment-resistant depression - Long-term Outcomes.
Bettina H Bewernick, Thomas Eduard Schlaepfer, Alena Braeuer, Jan Bostroem, Horst Urbach, Volker Arnd Coenen (Germany)

081#8529 _ Deep brain stimulation for the early treatment of the minimally conscious state and vegetative state. Experience in 14 patients.
Darko Chudy, Vedran Deletis, Fadi Almahariq, Petar Marcinkovic, Jasenka Skrlin, Veronika Paradzik (Croatia)

082#8511 _ Deep brain stimulation of the subthalamic nucleus reduces motivation for cocaine while increasing that for apple sauce in the monkey.
Jean Régis, Sabrina Ravel, Pierre Yves Borius, Jean Luc Anton, Ivan Balansard, Bruno Nazarian, Christelle Baunez (France)

10:10-11:40 PARALLEL SESSION 9 **MOVEMENT DISORDERS** *TAPICES ROOM*

Chairmen : Jorge Guridi (Spain), Michel Lefranc (France), Istvan Valalik (Hungary)

ORAL COMMUNICATIONS :

083#8589 _ Chronic directional deep brain stimulation in movement disorders - one year of clinical experience.
Martin Klehr, Till Dembek, Harald Treuer, Andreas Gierich, Jochen Wirths, Lars Timmermann, Veerle Visser-Vandewalle (Germany)

084#8611 _ Meta-analysis of 94 studies assessing adverse events associated with deep brain stimulation surgery and implanted hardware.
Wolfgang Hamel, Torge Huckhagel, Katja Engel, Alessandro Gulberti, Ute Hidding, Monika Poetter-Nerger, Andreas AK Engel, Christian Gerloff, Manfred Westphal, Carsten Buhmann, Christian KE Moll, Johannes A Koeppen (Germany)

085#8665 _ Image guided and verified subthalamic stimulation (STN-DBS) for Parkinson's disease performed under general anesthesia is providing the same therapeutic window as a local anesthesia STN-DBS procedure.
Michel Lefranc, Yassine Zouitina, Melissa Tir, johan Peltier, Pierre Krystkowiak (France)

086#8761 _ Intraoperative neurophysiological markers of the success of STN-DBS: microelectrode recordings, stimulation, local field potentials ?
Colette Boex, Rémi Tyrand, Judit Horvath, Vanessa Fleury-Nissen, Marco Corniola, Sarvenaz Sadri, Christian Lüscher, Pierre Pollak, Pierre Burkhard, Shahan Momjian (Switzerland)

087#8581 _ Deep brain stimulation in the caudal zona incerta versus best medical treatment in patients with Parkinson´s disease; a randomised blinded evaluation.
Jan Linder, Patric Blomstedt, Rasmus Stenmark, Gun-Marie Hariz, Lars Forsgren, Marwan Hariz (Sweden, UK)

FLASH COMMUNICATIONS:

F39#8672 _ Initial implantation of rechargeable IPGs in DBS patients with movement disorders: user confidence and satisfaction, evaluation of recharging and adverse events.
Martin Jakobs, Manja Kloss, Andreas Unterberg, Karl Kiening (Germany)

F40#8599 _ Long-term follow-up of patients' quality of life and expectations in subthalamic nucleus stimulation for Parkinson's disease.
Nilesh Mundil, Hsin Yin Ling, Harutomo Hasegawa, Natasha Hulse, Michael Samuel, Keyoumars Ashkan (UK)

F41#8773 _ Preliminary experience of Thalamotomies induced by a trans-cranial MRI-guided Focused Ultrasound Surgery (tcMRgFUS) system operating at 1,5 Tesla, in a series of tremorigen patients not suitable for DBS.
Domenico Iacopino, Antonella Giugno, Cesare Gagliardo, Alessandro Napoli, Angelo Franzini, Giuseppe Roberto Giammalva, Carlo Catalano, Massimo Midiri (Italy)

F42#8775 _ Altered FDG metabolism by Subthalamic deep brain stimulation in patients with Parkinson's disease.
Cao Chunyan, Zhang Huiwei, Zhang Jing, Zhang Xiaoxiao, Sun Bomin (China)

F43#8804 _ Anatomical Landmarks for Deep Brain Stimulation Shift.
José Pedro Lavrador, Pedro Batista, Bruno Miranda, Diogo Belo, Diogo Simão, Miguel Coelho, Leonor Guedes, António Gonçalves-Ferreira, Maria Begoña Cattoni, Manuel Herculano Carvalho (Portugal)

F44#8881 _ Functional electrical stimulation (FES) of the peroneal nerve for Patients with Parkinsons Disease and Freezing.
Frank Hertel, Frank Hertel, Robert Mandler, Bianka Kuenzli (Germany)

12:00-12:45 CLOSING LECTURES *AUDITORIUM*

Chairmen : Juan Barcia (Spain), Damianos Sakas (Greece)

12:00-12:20 > Current state of surgical management of Psychiatric disorders. ***Marwan Hariz (UK)***
12:20-12:45 > Update on HIFU. ***Andres Lozano (Canada)***

12:45-13:15 ESSFN RESEARCH GRANT 2014 REPORT

Chairmen : Juan Barcia (Spain), Damianos Sakas (Greece)

> ***#8525*** Closed-loop brain stimulation for psychiatric disorders: evidence from rodent and human studies.
Hemmings Wu, Ioana Nica, Tim Tambuyzer, Marjolijn Deprez, Kris van Kuyck, Jean-Marie Aerts, Sabine Van Huffel, Bart Nuttin, Robert Malenka, Casey Halpern (USA, Belgium)

13:15-13:45 ESSFN RESEARCH AWARD

Chairmen : Juan Barcia (Spain), Damianos Sakas (Greece)

BUSINESS MEETINGS

WEDNESDAY 28 SEPTEMBER

09:00-12:00 **ESSFN OFFICERS MEETING** *EL JARDIN ROOM*

14:00-16:00 **ESSFN EDUCATIONAL COMMITTEE MEETING** *EL JARDIN ROOM*

THURSDAY 29 SEPTEMBER

07:00-08:30 **MEETING OF THE WSSFN COMMITTEE FOR PSYCHIATRIC DISORDERS** *EL JARDIN ROOM*

12:00-13:30 **ESSFN EXECUTIVE COMMITTEE LUNCH MEETING** *EL JARDIN ROOM*

FRIDAY 30 SEPTEMBER

12:00-13:30 **WSSFN BOARD MEETING** *EL JARDIN ROOM*

POSTER PRESENTATIONS

BRAIN MACHINE INTERFACE AND IMAGING

B1#8586 Deep Brain Stimulation Steering of the Electric Field: A Patient-Specific Simulation Study.
Fabiola Alonso, Nathanael Göransson, Malcolm Latorre, Peter Zsigmond, Karin Wårdell (Sweden)

EPILEPSY

EP1#8454 The advantages of stereotactic treatment of patients with temporal lobe epilepsy.
Andrei Kholiavin, Alexander Gurchin, Vladimdr Nizkovolos, Natalia Sterlikova, Andrei Anichkov, Roman Seliverstov, Stanislav Mozhaev, Larisa Melucheva, Andrei Oblyapin (Russia)

EP2#8475 Stereo-EEG implanted electrodes with neuronavigation arm.
Alexandre Rainha Campos, Ana Rita Peralta, Carla Bentes, António Gonçalves-Ferreira (Portugal)

EP3#8497 Epidural empyema as a late complication of complex epilepsy surgery.
Stefanos Korfias, Konstantinos Themistoklis, Eustathios Vlachakis, Spyridon Komaitis, Dimitrios Giakoumettis, Konstantinos Boviatsis, Marios Themistocleous, ≤Damianos Sakas (Greece)

EP4#8595 Intracranial stimulation in children with refractory epilepsy: a case series.
Antonio Valentin, Richard Selway, Meriem Amarouche, Nilesh Mundil, Ismail Ughratdar, Leila Ayoubian, David Martin-Lopez, Farhana Kazi, Talib Dar, Gonzalo Alarcon (UK, Spain)

EP5#8620 Surgical treatment for refractory epilepsy: volumetric analysis of hippocampal/amygdala resection in MTLE and case series review.
Daniela De Matos (Portugal)

EXPERIMENTAL

EXP1#8037 Stereotactic surgery before brain surgery.
Pierre Bourdillon, Caroline Apra, Marc Levêque (France)

EXP2#8477 Network-level effects of deep brain stimulation: fMRI study of electrical microstimulation in the internal segment of the globus pallidus in monkeys.
Hirokazu Iwamuro, Edit Frankó, Stéphane Palfi, Olivier Joly (Japan, UK, France)

EXP3#8502 Internal pulse generator in Deep Brain Stimulation: rechargeable or not?
Michele Rizzi, Giuseppe Messina, Federica Penner, Antonio D'Ammando, Francesco Muratorio, Franzini Angelo (Italy)

EXP4#8507 Long-term motor deficits after controlled cortical impact in rats can be detected by fine motor skill tests but not by automated gait analysis.
Lisa-Maria Schonfeld, Ali Jahanshahi, Sven Hendrix, Yasin Temel (The Netherlands, Belgium)

EXP5#8518 Effects of 5 weeks fornix deep brain stimulation in a transgenic Alzheimer rat model.
Aurelie Leplus Wuertzer, Frederic Checler, Denys Fontaine, Lydia Kerkerian Le Goff (France)

EXP6#8821 Cone-beam-CT in DBS surgery.
Felix Gubler, Walter Backes, Linda Ackermans, Pieter Kubben, Mark Kuijf, Mayke Oosterloo, Yasin Temel (The Netherlands)

EXP7 Reciprocal regulation of the cholinic phenotype and epithelial-mesenchymal transition in glioblastoma cells
Jaroslaw Maciaczyk, Katharina Koch, Rudolf Hartmann, Abigail Kora Suwala, Donata Maciaczyk, Andrea Caroline Krüger, Dieter Willbold, Jan Vesper, Ulf Dietrich Kahlert (Germany)

EXP8 Pharmacological WNT-inhibition acts synergistically with chemo- and radiotherapy by overcoming treatment-resistance in Glioma Stem Cells
Jaroslaw Maciaczyk, Abigail K. Suwala, Katharina Koch, Donata Maciaczyk, Jan Vesper, Ulf D. Kahlert (Germany)

MOVEMENT DISORDERS

MOV1#8160 DBS for NBIA-related general dystonia. Eight years follow-up.
Tomasz Kmiec, Henryk Koziara, Wieslaw Bonicki, Tomasz Mandat (Poland)

MOV2#8423 The use of dexmedetomidine during deep brain stimulation for Tourette syndrome: a case report.
Michiel Bos, Mark Janssen, Anouk Smeets, Wolfgang Buhre, Yasin Temel, Ackermans Linda (The Netherlands)

MOV3#8450 Evaluation of neuroprotective effect of DBS STN: long term clinical studies review.
Napoleon Torres, Stephan Chabardes, John Mitrofanis, Alim Benabid (France, Australia)

MOV4#8455 Hypnosis for awake bilateral DBS (Deep Brain Stimulation) of Gpi in a young woman with secondary dystonia.
Maria Luisa Malafronte, Flavio Giordano, Michele Cavallo, Anna Zicca, Barbara Spacca, Federico Melani, Lorenzo Genitori (Italy)

MOV5#8460 DIRECT DBS: A Prospective, Multi-Center Clinical Trial with Blinding for a Directional DBS Lead.
Jens Volkmann, Stephen Chabardes, Peter R. Schuurman, David Blum, G. Karl Steinke, Stephen Carcieri, Ljubomir Manola, Nic Van Dyck (Germany, France, USA, Belgium)

MOV6#8484 Electrophysiological findings during DBS as a salvage bilateral procedure two years after initial successful unilateral Gamma Knife thalamotomy for essential tremor.
Constantin Tuleasca, Etienne Pralong, Francois Vingerhoets, Laura Negretti, Maud Marguet, Elena Najdenovska, Meritxell Bach Cuadra, Jean Régis, Jocelyne Bloch, Marc Levivier (Switzerland, France)

MOV7#8493 Unilateral VIM and GPI stimulation for treatment of Holmes' tremor caused by an arteriovenous malformation in the midbrain.
Anne Laure Salado, Gabriel De Mijolla, Nicolaï Gospodaru, Emmanuelle Schmitt, Serge Bracard, Sophie Colnat-Coulbois (Belgium, France)

MOV8#8503 Efficacy of directional leads in DBS for movement disorders.
Andrea Landi, David Pirillo, Massimo Piacentino, Angelo Padoan, Giusy Guzzi, Manuela Pilleri, Angelo Antonini, Erik Sganzerla, Lorenzo Volpin, Angelo Lavano, Domenico D'Avella (Italy)

MOV9#8506 What are the side effects of deep brain stimulation in the treatment of Parkinson Disease? A single center experiences with 62 patients.
Ahmet Acarer, Seyma Ciftci, Zafer Colakoglu (Turkey)

MOV10#8509 Treatment of dystonia after kernicterus with deep brain stimulation. Validation of clinical benefits during complicated postsurgical follow-up.
Klaus Novak, Anna Zeitlberger, Brigitte Gatterbauer, Gottfried Kranz, Michael Freilinger (Austria)

MOV11#8514 Infections in deep brain stimulation: shaving versus not shaving.
Felix Gubler, Linda Ackermans, Pieter Kubben, Aysun Damci, Mark Kuijf, Mayke Oosterloo, Yasin Temel (The Netherlands)

MOV12#8521 Perioperative technical complications in deep brain stimulation surgeries.
Onur Alptekin, Yasin Temel, Ersoy Kocabicak (The Netherlands, Turkey)

MOV13#8527 Stereotactic accuracy: a systematic review and meta-analysis.
Carmen Waterink, Felix Gubler, Linda Ackermans, Mayke Oosterloo, Mark Kuijf, Olaf Schijns, Rein Vos, Yasin Temel, Pieter Kubben (The Netherlands)

MOV14#8530 Bilateral STN DBS in PD patients with camptocormia.
Darko Chudy, Fadi Almahariq, Petar Marcinkovic, Vladimira Vuletic, Dominik Romic, Ivica Franciskovic (Croatia)

MOV15#8547 Morbidity and Comorbidity of Deep Brain Stimulation - A Fourteen-Years Retrospective Cohort Study.
Pan Yan Hong, Chen Shin Yuan, Lin Shine Zong (Taiwan)

MOV16#8548 Effect of provocation test on heart rate and mean arterial pressure during subthalamic deep brain stimulation with general anesthesia.
Shin-Yuan Chen, Yan-Hong Pan, Shee-Ping Chen (Taiwan)

MOV17#8550 Bilateral Gpi-DBS in belly dancer's dyskinesia.
István Valálik, Ákos Jobbágy, Ferenc Pongrácz, Péter Szloboda (Hungary)

MOV18#8551 Porting a smartphone tremor app to smartwatch for telemonitoring.
Pieter Kubben, Mark Kuijf, Albert Leentjens, Linda Ackermans, Mayke Oosterloo, Yasin Temel (The Netherlands)

MOV19#8552 A comparison between deep brain stimulation for essential tremor in the ventral intermediate nucleus vs. the posterior subthalamic area.
Aurélie Degeneffe, Linda Ackermans, Yasin Temel, Mark Kuijf, Mayke Oosterloo, Pieter Kubben (The Netherlands)

MOV20#8560 Long-term follow-up of combined thalamic and pallidal stimulation in a dystonic head tremor patient using a novel deep brain stimulation device.
Christian KE Moll, Carsten Buhmann, Johannes A Koeppen, Christian Gerloff, Andreas AK Engel, Manfred Westphal, Wolfgang Hamel (Germany)

MOV21#8562 Clinical improvement in deep brain stimulation with the use of the O-arm.
Edurne Ruiz de Gopegui, Gaizka Bilbao, Iñigo Pomposo, Imanol Lambarri, Juan Carlos Gómez, Beatriz Tijero, Koldo Berganzo, Olivia Rodriguez, Rafael Villoria, Josu Mendiola, Ainara Dolado (Spain)

MOV22#8563 Objective quantification of rigidity during deep brain stimulation surgery.
Peter Poortvliet, Anders Fytagoridis, Terry Coyne, Peter Silburn, Andy Cresswell (Australia, Sweden)

MOV23#8567 Deep brain stimulation site relative to the MER-defined STN one year after surgery predicts motor improvement in PD.
Rens Verhagen, Vincent J. J. Odekerken, Rob M. A. de Bie, Pepijn van den Munckhof, Lo J. Bour, P. Richard Schuurman (The Netherlands)

MOV24#8569 Functional Brain Imaging of DBS-treated Essential Tremor.
Amar Awad, Patric Blomstedt, Göran Westling, Johan Eriksson (Sweden)

MOV25#8574 The effect of bilateral subthalamic deep brain stimulation on cognitive functions in Parkinson's disease.
Gyula Demeter, Gyula Demeter, Péter Pajkossy, Ágnes Szollosi, Ágnes Lukács, István Valálik, Mihály Racsmány (Hungary, Poland)

MOV26#8575 Retrospective evaluation of the non-linear whole-brain MNI152 atlas registration for Vim-DBS targeting.
Péter Szloboda, Ferenc Pongrácz, István Valálik (Hungary)

MOV27#8579 Comparison of battery longevity in two commonly used implantable pulse generators for deep brain stimulation.
Benjamin Fisher, Jamilla Kausar, Hayley Garratt, James Hodson, Anwen White, Ramesh Chelvarajah, Ismail Ughratdar, Rosalind Mitchell (UK)

MOV28#8580 Management of traumatic subdural hematoma in a DBS-STN patient.
Zuhtu Ozbek, Serhat Ozkan, Murat Vural (Turkey)

MOV29#8593 Novel insights into the basal ganglia: visualisation of the micro-circuitry by ultra-high field MRI of the post mortem human brain.
Yasin Temel (The Netherlands)

MOV30#8598 Experience of deep brain stimulation for dystonia treatment in Tyumen.
Albert Sufianov, Vladimir Shabalov, Alexander Orlov, Sergey Churkin, Tatyana Kazantceva (Russia)

MOV31#8602 Subcutaneous fibrosis around extension cables in DBS- case report and the literature review.
Aurelia Kollova, Aurelia Kollova, Matej Skorvanek, Kamil Knorovsky, Vladimir Han (Slovakia)

MOV32#8603 Intraoperative quantitative tremor evaluation in deep brain stimulation surgery.
Ashesh Shah, Jérôme Coste, Jean-Jacques Lemaire, Ethan Taub, W. M. Michael Schüpbach, Claudio Pollo, Raphael Guzman, Karin Wårdell, Erik Schkommodau, Simone Hemm-Ode (Switzerland, France, Sweden)

MOV33#8605 Improving DBS targeting using 3D visualization of intraoperative stimulation tests.
Ashesh Shah, Fabiola Alonso, Jean-Jacques Lemaire, Karin Wårdell, Daniela Pison, Jérôme Coste, Erik Schkommodau, Simone Hemm-Ode (Switzerland, France)

MOV34#8606 Long-term follow-up of unilateral DBS of the caudal Zona incerta for Parkinsonian tremor.
Rasmus Stenmark Persson, Patric Blomstedt, Anders Fytagoridis (Sweden)

MOV35#8614 Differential approach to neurosurgical treatment of dystonia patients.
Anna Gamaleya, Alexey Tomskiy, Andrey Dekopov, Anna Poddubskaya, Ekaterina Salova, Emil Isagulyan, Svetlana Buklina, Vladimir Shabalov (Russia)

MOV36#8617 Neurosurgical management of Holmes-tremor: a multitarget approach using advanced planning techniques.
Loránd Eross, László Halász, Gertrúd Tamás, Dániel Fabó, László Entz (Hungary)

MOV37#8656 Neuropsychiatric Effects of Deep Brain Stimulation and Levodopa-carbidopa Intestinal Gel in Advanced Parkinson's Disease.
Diana Radu Djurfeldt, Long Long Chen, Edvard Nilsson, Jennifer Lundin, Anders Johansson, Gastón Schechtmann (Sweden)

MOV38#8747 The Evolution Of Cognitive Abilities And Disability In Parkinson's Disease After Ten Years Of Subthalamic Deep-Brain Stimulation.
Riccardo Antonio Ricciuti, Marianna Capecci, Valentina Bartolini, Martina Pigliapoco, Elisa Andrenelli, Maria Gabriella Ceravolo, Massimo Scerrati (Italy)

MOV39#8762 Successful combination of SPG and ONS for cluster headache.
Vesper Jan, Slotty Philipp, Jarek Maciaczyk, Thomas Klenzner (Germany)

MOV40#8764 Successful High Frequency Burst Stimulation In Refractory Angina Pectoris.
Vesper Jan, Jarek Maciaczyk, Stefan Schu, Slotty Philipp (Germany)

MOV41#8766 Usefulness of segmented leads in anatomical variants of the brain.
Vesper Jan, Youssef Abushaba, Slotty Philipp (Germany)

MOV42#8771 High-Frequency Spinal Cord Stimulation in Surgery-naïve Patients - A Prospective Single-Center Study.
Sebastian Ahmadi, Jan Vesper, Stefan Schu, Philipp Slotty (Germany)

MOV43#8798 Functional and painful Pudendal Syndrome: outcome with pulsed radiofrequency as first treatment step.
Gustavo Lucas Garategui, Carlos Javier Calvimonte, Jorge Ariel Rasmussen, Maximiliano Toscano, Ignacio Flores, Carlos Alberto Ciraolo (Argentina)

MOV44#8802 Therapeutic susceptibility of head tremor in patients affected by essential tremor after unilateral thalamotomy of the drive side with mrgfus.
Antonella Giugno, Domenico Gerardo Iacopino, Angelo Franzini, Giuseppe Roberto Giammalva, Cesare Gagliardo, Carlo Catalano, Massimo Midiri (Italy)

MOV45#8822 Prevalence of Twiddler's Syndrome may be higher in the Internal Pulse Generators Harboring One Anchoring Hole than Two Anchoring Holes.
Michael Sobstyl, Miroslaw Zabek (Poland)

MOV46#8823 Pallidal deep brain stimulation in the treatment of Meige syndrome.
Michael Sobstyl, Miroslaw Zabek (Poland)

MOV47#8824 Deep brain stimulation of the internal globus pallidus for disabling haloperidol-induced tardive dystonia. Report of three cases.
Michael Sobstyl, Miroslaw Zabek (Poland)

MOV48#8842 The human globus pallidus internus is sensitive to rewards - evidence from intracerebral recordings.
Thomas F Muente, Josep Marco-Pallares, Seza Bolat, Marcus Heldmann, Götz Lütjens, Wido Nager, Joachim K. Krauss (Germany, Spain)

MOV49#8843 Stable symptom improvement after battery depletion in a patient with deep brain stimulation for secondary dystonia.
Marc E Wolf, Christian Blahak, Christoph Schrader, Joachim K. Krauss (Germany)

MOV50#8846 The spinal cord stimulation to patients with pain and spastic syndromes.
Oleg Kamadey (Russia)

MOV51#8849 Optimization of deep brain stimulation by means of a patient-specific mathematical model.
Ruben Cubo, Elena Jiltsova, Markus Fahlström, Helena Andersson, Alexander Medvedev (Sweden)

MOV52#8853 Characterization of pre- and post-weaning behavior in a rodent model of depression: Early affective dysfunction reflected in Vocalization.
Lisa Selesnew, Stephanie Thiele, Volker A. Coenen, Máté Döbrössy (Germany)

MOV53#8854 Subthalamic nucleus Deep Brain Stimulation does not affect language and cognitive abilities of Greek-speaking individuals with Parkinson's disease.
Constantine Constantoyannis, Valantis Fyndanis, Eleni Barampati, Arhonto Terzi, Jhon Ellul (Greece, Norway)

MOV54#8855 Olfactory memory deficits in the Flinders Sensitive Line rodent model of depression.
Alex Cook, Lisa Selesnew, Stephanie Thiele, Volker A. Coenen, Máté Döbrössy (Germany)

MOV55#8866 Dynamics of STN low-frequency components upon DBS.
Sebastián Castaño-Candamil, Peter Reinacher, Volker A. Coenen, Michael Tangermann (Germany)

MOV56#8877 Impact of segmented leads for DBS.
Vesper Jan, Jarek Maciaczyk, Slotty Philipp (Germany)

MOV57#8879 First experiences with directional leads for DBS in Parkinsons patients.
Frank Hertel, Frank Hertel, Robert Mandler, Bianka Kuenzli, Reijko Krueger (Luxembourg, Germany)

MOV58#8888 Rechargeable pacemaker technology in deep brain stimulation: a step forward, but nor for everyone.
Joachim Runge, Andreas Wloch, Mahmoud Abdallat, Assel Saryyeva, Joachim K. Krauss (Germany)

MOV59#8890 Reward processing modulates subthalamic beta band activity in patients with Parkinson's disease.
Henning Schroll, Andreas Horn, Joachim Runge, Axel Lipp, Gerd-Helge Schneider, Fred H Hamker, Joachim K. Krauss, Andrea A Kühn (Germany)

MOV60#8894 Hyperkinesias after long term pallidal stimulation for dystonia.
Andreas Wloch, Lütjens Götz, Christoph Schrader, Christoph Blahak, Joachim Krauss (Germany)

MOV61#8895 Complications of deep brain stimulation for secondary dystonia in the early postoperative period (30-day morbidity): an experience in 49 patients.
Andreas Wloch, Abdallat Mahmoud, Assel Saryyeva, Christoph Blahak, Christoph Schrader, Joachim Krauss (Germany)

MOV62#8896 Long term follow-up in Mohr-Tranebjaerg syndrome after pallidal stimulation.
Andreas Wloch, Hansjörg Bäzner, Christoph Blahak, Joachim Krauss (Germany)

ONCOLOGY

ONC1#8564 Rona guided stereotactic biopsy - case report.
Dominik Romic, Bojan Jerbic, Fadi Almahariq, Domagoj Dlaka, Petar Marcinkovic, Ivica Franciskovic, Darko Chudy (Croatia)

PAIN

P1#8284 Approaching foramen ovale under real-time fluoroscopy through Hartel`s entry for management of trigeminal neuralgia: Technical note.
Ali Khedr, Mohamed Halawa, Ayman Galhom, Amgad Matter, Medhat Mostafa (Egypt)

P2#8322 Value of neuronavigation and O-arm® in accurate intra-operative positioning of SPG microstimulation for cluster headache.
Iulia Peciu-Florianu, Alexandre Assaf, Bernard Nater, Marc Levivier, Philippe Pasche, Jocelyne Bloch (Switzerland, Germany)

P3#8469 Functional neurosurgery in trigeminal neuropathy and Neuralgia. The Force awakens!
Apostolos Chatzikalfas, George Matis, Athanasios Koulousakis, Univ.-Prof. Dr. Veerle Visser-Vandewalle (Germany)

P4#8487 Chronic vagal nerve stimulation in intractable hiccup. Case report and review of literature.
Alessandro Dario (Italy)

P5#8516 Spinal cord stimulation for ischemic pain syndrome (the siberian experience).
Vladimir Murtazin, Vladimir Murtazin, Vladimir Shabalov, Andrey Ashurkov, Alexey Krivoshapkin, Kirill Orlov (Russia)

P6#8531 Microvascular decompression of trigeminal nerve for chronic cluster headache: report of two cases and brief review of literature.
Crhistian David Garcia Montoya, Antonio Garcia Lopez, Pedro De La Rosa Jimenez, Marcelo Galarza, Beatriz Cuartero Perez, Claudio Jose Piqueras Perez (Spain)

P7#8561 treatment of potential ischemic pain syndrome with spinal cord stimulation.
Liu Jung-Tung (Taiwan)

P8#8600 Dorsal Ganglion Stimulation with novel minature lead wireless stimulator.
Pawel Sokal, Marek Harat, Marcin Rudas, Marcin Rusinek, Piotr Zielinski (Poland)

P9#8604 Potential psychological predictors of motor cortex stimulation efficacy for the treatment of chronic neurogenic pain syndromes.
Evgeniy Dorokhov, Emil Isagulyan, Aleksey Tomskiy, Maxim Churyukanov, Nikolay Yakhno (Russia)

P10#8615 Microvascular decompression for trigeminal neuralgia - a 102 patients surgical series from centro hospitalar e universitário de coimbra.
Sofia Tavares, Ricardo Pereira, Gonçalo Guerreiro Costa, Daniela Matos, Pedro Cunha, Marcos Barbosa (Portugal)

P11#8626 Microvascular Decompression or Neuromodulation in Patients with SUNCT and Trigeminal Neurovascular Conflict?
Samih Hassan (UK)

P12#8834 Severe pain and oedema due to a widespread lymphangioma: disappearance of symptoms and reduction of lesion with spinal cord stimulation.
Ivano Dones, Michele Rizzi, Vincenzo Levi, Giuseppe Messina, Franzini Angelo (Italy)

PSYCHIATRIC DISORDERS

PSY1#8392 Basal ganglia disinhibition in Tourette Syndrome; patient and animal model of tic expression.
Michal Israelashvili, Anouk Smeets, Albert Leentjens, Vivianne van Kranen-Mastenbroek, Mark Janssen, Yasin Temel, Linda Ackermans, Ihzar Bar-Gad (Israel, The Netherlands)

PSY2#8462 Deep Brain stimulation in bed nucleus of stria terminalis and medial forebrain bundle in a patient with major depressive disorder and anorexia nervosa.
Matilda Naesström, Owe Bodlund, Patric Blomstedt (Sweden)

PSY3#8463 Deep brain stimulation for obsessive-compulsive disorder. Knowledge and concerns among psychiatrists, psychotherapists and patients.
Matilda Naesström, Owe Bodlund, Patric Blomstedt (Sweden)

PSY4#8556 Bilateral anterior cingulotomy for chronic, treatment-refractory depression: effects on interpersonal functioning and relationship to symptom change.
Anne Mather, David Christmas, Keith Matthews (UK)

PSY5#8607 Nucleus accumbens stimulation in pathological obesity- cases of three patients.
Marcin Rudas, Marek Harat, Pawel Sokal (Poland)

RADIOSURGERY

RAD1#8513 Diffusion weighted imaging of peripheral nerves in high intensity focused ultrasound surgery.
Matthew Walker, Jidan Zhong, Adam C Waspe, Karolina Piorkowska, James Drake, Mojgan Hodaie (Canada)

SPASTICITY

SPA1#8420 Management of life-threatening complications of Intrathecal baclofen therapy.
Ahmed Alkhani (Saudi Arabia)

SPA2#8499 A new « hybrid » pump for intrathecal baclofen therapy.
Konstantinos Themistoklis, Stefanos Korfias, Aristotelis Kalyvas, Nikolaos Boutos, Konstantinos Boviatsis, Dimitrios Giakoumettis, Eustathios Vlachakis, Marios Themistocleous, Damianos Sakas (Greece)

INVITED SPEAKERS

> Julio ALBISUA (SPAIN)

Julio Albisua MD, PhD is Head of the Department of Neurosurgery of Fundación Jimenez Díaz in Madrid. He is Professor at the Medicine School of the Universidad Autonoma de Madrid. His epilepsy surgery program is one of the most active programs in Spain. He has authored several publications and book chapters, mainly about temporal lobe epilepsy.
He is actually serving as Secretary of the Spanish Society of Functional Neurosurgery (SENFE), Vicepresident of the Madrid Neurosurgical Society (SONCAM) and as President of the Spanish Brain Council (SBC-CEC).
Medical Licensure: Universidad Complutense, Madrid, Spain 1988
Medical PhD; Universidad Autonóma, Madrid, Spain, 2000
Neurosurgeon (Spanish MIR program) Fundación Jimenez Díaz, Madrid Spain 1990-1995

> Tipu AZIZ (UK)

Professor of Neurosurgery
I am the founder and head of Oxford functional neurosurgery. My primate work was central to confirming the subthalamic nucleus as a possible surgical target for deep brain stimulation in Parkinson's disease and more recently the pedunculopontine nucleus. OFN is currently one of the busiest centres for such surgery in the UK and academically very productive.
Research Interests are the role of the upper brain stem in the control of movement, the clinical neurophysiology of movement disorders and neuropathic pain and autonomic responses to deep brain stimulation, use of MR and MEG imaging in functional neurosurgery.

> Juan A. BARCIA (SPAIN)

Prof. Juan A. Barcia (Valencia, Spain, 1962) is currently Head of the Department of
Neurosurgery and Full professor and Chair of Neurosurgery at the University Hospital "Hospital Clínico San Carlos" in Madrid, Spain, and at the Universidad Complutense de Madrid.
Board certified in Neurosurgery since 1992, he received his MD in 1987 and PhD in 1996. He has been Associate professor of Neurosurgery at the University of Valencia; Head of Clinical Division, Service of Neurosurgery at the Hospital General Univeristario de Valencia; Head of the laboratory of Neural Regeneration and Neural Repair of the Centro de Investigación Príncipe Felipe in Valencia, and Scientific Director of the Research Foundation at the Hospital General Universitario de Valencia. There he developed a program to support research activity obtaining a fivefold raise in Hospital's research indicators, and raised funds worth more than 2 million euros for the construction and equipping of laboratories, especially dedicated to cell therapy.
He received his doctorate from the University of Valencia and completed his residency in neurosurgery at the Hospital Clinico Universitario de Valencia, extending studies of functional neurosurgery at the Karolinska Hospital in Stockholm, Sweden, and of epilepsy surgery at the Montreal Neurological Institute in Canada.
From the clinical point of view, he has developed programs in surgery in Parkinson's disease, epilepsy surgery, pain surgery, psychiatric surgery, radiosurgery, neuro-oncology, neuronavigation and neuroendoscopy and bioethics and quality of life in neurosurgical patients.
His research has focused on new indications in stereotactic radiosurgery, the search for surgical treatments for drug-resistant neurological diseases, particularly in intracerebral infusion of anticonvulsant drugs, neurostimulation and cell therapy applied to neurological diseases.
His research projects include the regeneration of the nigrostriatal pathway with biomaterials in Parkinson disease models, the use of biomaterials for the repair of the cerebral cortex, the definition of targets for deep brain stimulation using brain connectomics and the induction of brain plasticity. He has been project leader of four national competitive projects (FIS, Spanish Ministry of Health), two of competitive autonomic projects, and of many more in other types of calls.
He has supervised 10 doctoral theses and has published more than 100 research papers in clinical and applied neurosciences.

> Jocelyne BLOCH (SWITZERLAND)

Dr Jocelyne Bloch is a neurosurgeon in charge of the stereotactic and functional program at the CHUV in Lausanne, Switzerland. Very active in experimental medicine and translational neuroscience, she nourishes a profound interest in the development of new indications for DBS, and in advancing technologies and therapeutic paradigms in neuromodulation, neuro-regeneration, and cell therapy. She seeks to gather all these novel therapeutic strategies under a common umbrella that will foster optimization of treatment options for patients suffering from neurological impairments.
She performed both basic and translational research projects in the field of gene and cel therapy and neuroregeneration. She acquired a substantial experience in experimental neurosurgery in multiple animal models of neurological disorders including Parkinson's disease and spinal cord injury. Together with Dr Jean François Brunet, she is pioneering the development of adult brain cell autologous transplantation for the treatment of stroke. She also collaborates with scientific groups of the centre for neuroprosthetics at EPFL. These research projects focus on the translation of electrochemical neuromodulation therapies to improve locomotion after spinal cord injury in humans, and for the development of closed-loop DBS strategies in Parkinsonian patients.

> Serge BLOND (FRANCE)

Professor Serge BLOND is the chief of Department of Neurosurgery at the universitary Hospital of Lille (France) . After a period of training near Professor J. Talairach (Paris) and Professor
J. Siegfried (Zûrich), he has created and developped the different components of Stereotaxy
anf Functional Neurosurgery . He has taken part in the birth and development of Radiosurgery in France (1989 with LINAC, 2004 with Gamma-Knife) and treated with his team many patients with preferential activity in the treatment of arterio-venous malformations. Since 1985, he has developed according to a multidisciplinary approach the different activities of a " Pain Clinic" in narrow relationship with Neurosurgery and he takes an important part in the teaching of Functional Neurosurgery, Stereotactic Radiosurgery and the different aspects of Chronic Pain.

> Peter BROWN (UK)

Peter Brown, Professor of Experimental Neurology and Director of the Medical Research Council Brain Network Dynamics Unit at the University of Oxford.
Peter Brown if Professor of Experimental Neurology at the University of Oxford and directs the Medical Research Council Brain Network Dynamics Unit at the University of Oxford. Until 2010 he was Professor of Neurology at University College London and Head of the Sobell Department of Motor Neurosciences and Movement Disorders. He leads a multidisciplinary motor control group and has demonstrated the importance of abnormal neural synchronisation in patients with Parkinson's disease and pioneered closed-loop deep brain stimulation in this condition.

> Grégoire COURTINE (SWITZERLAND)

Ecole Polytechnique Fédérale de Lausanne
Professor, IRP Chair in Spinal Cord Repair
Center for Neuroprosthetics and Brain Mind Institute
Associate MD at the University Hospital of Vaud (CHUV)
http://courtine-lab.epfl.ch/
https://www.ted.com/talks/gregoire_courtine_the_paralyzed_rat_that_walked
Grégoire Courtine was trained in Mathematics, Physics, and Neurosciences. He received his PhD degree in Experimental Medicine in France in 2003. After obtaining the Chancellor Award during his post-doctoral training at the University of California Los Angeles (UCLA), where he was also associate for the Christopher and Dana Reeve Foundation, he established his own laboratory at the University of Zurich in 2008. He received the Schellenberg Prize for his

work in paraplegia and prestigious fellowships from the European Research Council in 2009 and 2016. In 2012, he became the International Foundation for Research in Paraplegia (IRP) chair in Spinal Cord Repair in the Center for Neuroprosthetics at the Swiss Federal Institute of Technology, Lausanne (EPFL). Over the past 15 years, Grégoire and his team have implemented a multifaceted research program with the aim to develop new neurotechnologies for spinal cord injury. The results of this research were recognized in various high-profile publications such as Science and Nature journals, and discussed extensively in national and international media. In 2013, he was invited to share his personal and scientific journey at TEDGlobal. In 2014, Grégoire launched his startup, G-Therapeutics, which aims to translate the medical and technological breakthroughs gained over the past 15 years into a treatment to accelerate and augment functional recovery after spinal cord injury.

> Antonio GONÇALVES-FERREIRA (PORTUGAL)

MD, PhD, Neurosurgeon, Consultant, Professor and chairman of Neurosurgery, Head of the Unit of Stereotactic and Functional Neurosurgery, University Hospital Santa Maria, Lisbon.
Professor and Chairman of Anatomy and Neuroanatomy, Lisbon Faculty of Medicine
Consultant of Neurosurgery of the National Council of Legal Medicine
Vice-President of the European Society for Stereotactic and Functional Neurosurgery (ESSFN) 2014-18
Member of the Directory of the Sociedad Española de Neurocirurgia Funcional e Estereotáxica (SENFE) 2013-17
President of the European Association of Clinical Anatomy (EACA) 2013-15
President of the EACA Congress, Lisbon 2013
President of the ESSFN Congress, Cascais 2012
Chairman of the EANS Research Committee 2001-05

> Jorge GURIDI (SPAIN)

Jorge Guridi performed his Residency in the Neurosurgical Department of Navarra Hospital and obtained the Neurosurgical Degree by Zaragoza University in 1983. His doctored thesis was obtained by Navarra University with the title: "Stereotactic lesion of NST in primates with Parkinsonism experimental" (1994). Currently Dr. Guridi is Functional specialist in Basal Ganglia with special interest in DBS surgery in Movement Disorders and Radiosurgery. He performed different stages in Mayo Clinic neurosurgical department in Rochester, Minnesota. Department of Neurosurgery at Emory University (Atlanta) and Western Toronto Hospital (Canada).
Currently Dr. Guridi is working in the Department of Neurosurgery in Clínica Universidad de Navarra. He is Associate Professor of Neurosurgery by ANECA (2004) in Navarra University. He is Member Executive of the European Stereotactic and Functional Neurosurgery (ESSFN) and Past-President in the Spanish Stereotactic and Functional Neurosurgery. He also is Professor of the Young Neurosurgeons training Program in Lausanne in Medtronic courses and Professor of ESSFN Hands on Courses for young neurosurgeons.
He is author of 120 papers about the field (H index of 31 in IST Web of Science) and more than 25 chapters of books.

> Marwan HARIZ (UK)

Marwan Hariz received the Baccalauréat in Beirut, Lebanon at the Lycée Franco-Libanais, then studied medicine in Reims, France and in Umeå, Sweden. He trained in Neurosurgery in Umeå, with Lauri Laitinen as main mentor. He received a PhD in 1990 in stereotactic neurosurgery. In 2002, he was recruited as professor to the United Kingdom's first Chair of Functional Neurosurgery at the National Hospital for Neurology and Neurosurgery, and Institute of Neurology, Queen Square, London, where he contributed to establish a multidisciplinary clinical-academic Unit of Functional Neurosurgery, and introduced the concept of MRI-guided and MRI-verified functional stereotactic neurosurgery, without the use of micro-electrode recording. His main interests are in surgery for movement disorders and psychiatric illness, in the history of this field, in ethics of functional neurosurgery, and in critical appraisal of published literature in these areas. He has published over 290 scientific papers and book chapters. He holds an adjunct professorship at University of Umeå, Sweden.

> Viktor JIRSA (FRANCE)

Viktor Jirsa is Director of the Inserm Institut de Neurosciences des Systèmes at Aix-Marseille-Université and Director of Research at the Centre National de la Recherche Scientifique (CNRS) in Marseille, France. Dr. Jirsa received his PhD in 1996 in Theoretical Physics and has since then contributed to the field of Theoretical Neuroscience, in particular through the development of large-scale brain network models based on realistic connectivity, linking network dynamics to brain function and imaging. His work has contributed to a better understanding of the resting state, epilepsy and motor coordination.

> Joachim K. KRAUSS (GERMANY)

Professor Joachim K. Krauss is Director and Chairman of the Department of Neurosurgery at Medical School Hannover, Germany. He received his MD degree at the Medical Faculty of the University of Freiburg, Germany, for his experimental work in neuropharmacology of the basal ganglia. He trained in neurology, and later in stereotactic and functional neurosurgery, and general neurosurgery with Professors Mundinger and Seeger in Freiburg. Thereafter, he moved to Houston, Texas, to collaborate with Drs Grossman and Jankovic.
He went back to Europe to establish functional neurosurgery in Berne, Switzerland, and in Mannheim, Germany. He became Associate Professor at the University of Heidelberg, Germany, and served as Adjunct Associate Professor at Baylor College of Medicine, Houston, Texas.
Dr. Krauss is President of the World Society for Stereotactic and Functional Neurosurgery since 2013, and Honorary and Past President of the European Society for Stereotactic and Functional Neurosurgery. He is an active member of several international societies, committees and advisory boards. One of his missions is to bridge the gap between Neurosurgery and Neurology why he is also active in the Movement Disorders Society where he served as Chair of the Task Force Neurosurgery and as Co-Chair of the Task Force Deep Brain Stimulation for Dystonia, and where he continues his activities in several task forces and working groups.
He has published more than 400 scientific manuscripts and book chapters, and he has edited four books in the field of functional neurosurgery. He introduced pallidal deep brain stimulation for cervical dystonia in 1997, and spinal cord stimulation for orthostatic tremor in 2002. He received several awards including the Oppenheim prize for his work in dystonia. He runs an active laboratory together with Professor Schwabe dedicated to the study of animal models of movement disorders and behaviour. His current research interests include experimental and clinical studies on the treatment of movement disorders, with a special focus on dystonia, but also psychiatric disorders and other applications of deep brain stimulation. In the past few years he put a particular focus on education and training.

> Andres LOZANO (CANADA)

Dr. Andres Lozano, Neurosurgeon, Krembil Neuroscience Centre, University Health Network
Professor and Chairman of Neurosurgery, University of Toronto
Dr. Lozano received his MD degree at the University of Ottawa and his neurosurgical training and PhD degree in Neurobiology at McGill. He received post-doctoral training in movement disorders at Queens Square, London, UK and in cell and molecular biology in Toronto. He is the Professor and Chairman of Neurosurgery at the University of Toronto and holds both the RR Tasker Chair in Functional Neurosurgery at the University of Toronto and the Toronto Western Hospital and a Tier 1 Canada Research Chair in Neuroscience. He has an active laboratory dedicated to the study of neuronal degeneration and regeneration and Functional Neurosurgery.
Dr. Lozano has over 500 publications, serves on the board of several international organizations and is a founding member of the scientific advisory board of the Michael J. Fox Foundation. He is the most cited neurosurgeon in the world according to Thompson Reuters. He has received a number of awards including the Olivecrona Medal and the Pioneer in Medicine award, has been elected a Fellow of the Royal Society of Canada and the Canadian Academy of Health Sciences and has received the Order of Spain and has been recognized as an Officer of the Order of Canada..
He is best known for his work in Deep Brain Stimulation (DBS). His team has mapped out cortical and subcortical structures in the human brain and has pioneered applications of DBS for various disorders including Parkinson's disease, depression, dystonia, anorexia, Huntington's and Alzheimer's disease. He has been involved in training over one hundred physicians from throughout the world, with the hope that this will mean better access for patients to neurosurgical treatments to alleviate some of the debilitating effects of Neurological and Psychiatric disorders.

> Roberto MARTÍNEZ ALVAREZ (SPAIN)

Roberto Martínez, MD, PhD, he is Head of the Stereotactic Functional Neurosurgery and Radiosurgery Department of Ruber International Hospital, Madrid, Spain.. Honorary Professor of Neurosurgery at Autonomous University of Madrid since 1991.

His clinical research activity is focused on surgery and radiosurgery of Psychiatric diseases.

He co-authored 182 peer-reviewed articles referenced in PUBMED.

Member of 10 International Medical Societies.

Member of the Board of the International Stereotactic Radiosurgery Society (ISRS)

> Jean REGIS (FRANCE)

Jean Regis, MD, is Full Professor of Neurosurgery at the Aix Marseille University (Marseille, France), and Neurosurgeon at the Timone University Hospital where he currently serves as Head the Stereotactic, Functional Neurosurgery and Radiosurgery Department. Honorary Professor of Neurosurgery at Tokyo Women Medical University (TWMU) since 2003.

His basic reasearch activiy (INSERM UMR 1106) is focused on radiosurgery of epilepsy in experimental models and cerebral cortex gyration modeling. His clinical research activity is dedicated to advance imaging applied to surgery of the cortex and the functional applications of radiosurgery and specialy its application to Epilepsy.

He co-authored >360 peer-reviewed articles referenced in PUBMED.

Vice President of the European Association of Neurosurgical societies (EANS) 2007 - 2011

Secretary of the European Society for Stereotactic and Functional Neurosurgery (ESSFN)

President of the International Stereotactic Radiosurgery Society (ISRS) 2011-2013

President of the European Gamma Knife Radiosurgery Society (EGKS) 2011-2015

Board member of the Société Française de Neurochirurgie (SFNC).

Member of the Board of directors of the World Society for Stereotactic and Functional Neurosurgery (WSSFN).

He is reviewer for the several main international journals.

> Francisco ROBAINA (SPAIN)

Francisco Robaina M.D. Ph.D

Born in Las Palmas de Gran Canaria, Canary Islands, Spain in December 1952. I did my medical studies in Tenerife, Canary Islands, betwenn 1970 to 1976, and the neurosurgical training (Residency) between 1976 to 1980 at Nuestra Señora de Candelaria Hospital in Santa Cruz de Tenerife, working there as Consultant Neurosurgeon until 1987, when I moved to Las Palmas de Gran Canaria, Canary Islands, Spain.

I obtained the Ph.D. degree at the University of Salamaca, Spain in 1996, and an extraordianry award from that University in 1997 for the work on Blood flow modification in humas with cervical spinal cord stimulation.

In 1994 I was nominated Head of the Chronic Pain and Functional Neurosurgery Unit at the University Hospital of Gran Canaria "Dr. Negrín Hospital". Between 1997 and 2005, I acted as Chief of the Neurosurgical Department at the mentioned hospital.

Master in Medical Direction and Management from the Health Institute Carlos III Spain , 2009

I have assisted for perfection purposes to stances at the Addenbrookes Hospital in Cambridge UK; Pain Relief Foundation, Walton Hospital, Liverpool, UK; Oulu University Hospital Finland,; Helsinki University Hospital , Finland; Abbot North Western Hospital, Minneapolis, USA; Duke University Hospital , Durham, North Caroline, USA.

Associate Professor of Neurosurgery, University of Las Palmas de Gran Canaria, 1992-2006

Publication of books, chapters and articles on Chronic Pain Management, in national and international publishers.

At present, I'm involved in a human research on cervical spinal cord stimulation and blood flow changes at brain level.

> David ROBERTS (USA)

David Roberts received his education from Princeton University, Dartmouth Medical School, and Oxford University. Following completion of his neurosurgical residency at Dartmouth, he joined the faculty. He has served as chief of neurosurgery at Dartmouth, president of the American Society for Stereotactic and Functional Neurosurgery, president of the Society of University Neurosurgeons, and Chairman of the American Board of Neurological Surgery. He is the editor of Stereotactic and Functional Neurosurgery. Research interests include image-guided neurosurgery, epilepsy, and optical imaging.

> Damianos SAKAS (GREECE)

DAMIANOS E. SAKAS, MD

Biographical Data

Dr. Damianos E. Sakas was born in Greece and he is a graduate of the University of Athens (1978), where he also completed his Doctoral Thesis (1988). He received his training in the Department of Neurology and Neurosurgery, University of Athens (1982-86). He has worked in the Massachusetts General Hospital, Harvard Medical School, Boston, USA (1986-89), the Institute of Neurological Sciences, University of Glasgow, Glasgow, Scotland (1990-91) and the National Centre for Neurosurgery, Dublin, R. Ireland (1991-93). He was appointed as Consultant Neurosurgeon and Honorary Senior Clinical Lecturer in the Midland Centre for Neurology and Neurosurgery, University of Birmingham, and the University Hospital Coventry and Warwickshire, University of Warwick, England (1993-99). He is a member of various professional societies and has held senior positions as President, Hellenic Neurosurgical Society, Chairman, Neuromodulation Committee, World Federation of Neurosurgical Societies (WFNS), Member of the EAN Education and Training Committee and Member of the Executive Committee, Second Secretary, Secretary and President (ESSFN). His special interests include Epilepsy and Movement Disorders Surgery, Neurotrauma, Vascular and Scull Base Surgery. Damianos E. Sakas has edited two books: Operative Neuromodulation. Functional Neuroprosthetic Surgery and Operative Neuromodulation. Neural Networks Surgery both published by Springer-Verlag, Wien (2007), and the book Introduction in Neurosurgery (in Greek, 2003). He has worked as Associate Editor or Member of the Editorial or Advisory Board in the Yearbook of Neurology and Neurosurgery, Yearbook of Medicine, Neurosurgical Review, and Neuromodulation. He has published more than 180 peer-reviewed articles and chapters in books and his work has been cited more than 1500 times in the international scientific literature. In 2000, Dr Damianos E. Sakas was elected as Professor of Neurosurgery and appointed as Chairman of the Department of Neurosurgery, University of Athens, Evangelismos General Hospital, Athens, Greece. Since 2010, he has been elected as a Member of the World Academy of Neurological Surgeons.

> Kita SALLABANDA (SPAIN)

Nuerosurgery , Department of Neurosurgery of University Clinic Hospital ¨San Carlos¨ ,Madrid. Associate professor of Neurosurgery of Universidad Complutense de Madrid

Doctor certificate in neurosurgery from 1998, certificated in neurosurgery in 1994, Albania and 2012, Spain.

Extending studies in Radiosuirgery and functional neurosurgery at the Karolinska Hospital in Stockholm , Sweeden.

Resident Tutor, from 2014 University Clinic Hospital of Madrid.Coordiantor of Neuro-Oncology commeete of University Clinic Hospital San Carlos ,Madrid.

Coordinator of CNS Radiosurgery Unit of Grupo Imoncology Madrid, Spain, Cyberknife Centre, from 2003.

President of Spanish Society of Radiosurgery from 2014, Vice President of Iberolatinamerican Society of Radiosurgery from 2015.

My research has been focused in the treatment of Brain and Medullary metastases with radiosurgery,the cualty of life of the patient and congictive function.Generaly focused in Radiosurgery of CNS, functional,oncology and vascular pathology.

More than 25 papers published in clinical applied neurosurgery , radiosurgery and oncology.

More than 100 oral and masterly communication in international and national meeting, as invited speaker.

COMMISSION OF THE ORDER OF CIVIL MERIT, from his Majesty The King Don Juan Carlos I, December 1999.

> Marc SINDOU (FRANCE)

Marc P. SINDOU M.D., D. Sc.

Medical Scientific Activity

- Founding Member of International Association for the Study of Pain (IASP) (1976)

- President (1997-2001) and Past-President (2001-2005) of the World Society for Stereotactic and Functional Neurosurgery (WSSFN).

- Vice-President of the European Association of Neurosurgical Societies (EANS) (1999-2003) and Teacher in the EANS Training Course(1985-2014)

- President of the "French Speaking Neurosurgical Society" (2007-2010)

- 26 Visiting Professorships. European Lecture 2007. Spiegel-Wycis Medal (World meeting of WSSFN, Toronto, 2009). Award of the ten Masters in Neurosurgery (World meeting of the World Federation of Neurosurgical Societies, Boston, 2009)

- 244 Invited-lectures in 54 different foreign countries. 640 scientific publications.

- Member of Editorial Board of several French and International journals, and Member of Foreign and International Neurosurgical Societies.

- 669 scientific publications

- Editor of "Practical Handbook of Neurosurgery", in 3 volumes (2009)

- Author of "Neurosurgery for Spasticity" (2014)

*** Main Topics of interest :**

1) Functional Neurosurgery (Pain, Spasticity, Epilepsy, Trigeminal Neuralgia, Neurovascular compression syndromes: 2922 operative cases over the last twenty years.

2) Microneurosurgery of Intracranial vascular malformations, Skull Base Tumors, Meningiomas.

3) Pioneer of DREZ-Surgery . Neurophysiology Applied to Neurosurgery

> Konstantin V. SLAVIN (USA)

Professor Konstantin Slavin, MD

Prof. Konstantin Slavin is a head of section of stereotactic and functional neurosurgery in the University of Illinois at Chicago. He also directs fellowship program in stereotactic and functional neurosurgery at UIC.

Prof. Slavin was born and raised in Baku, Azerbaijan. After graduation from medical school he completed residency in neurosurgery in Moscow under Prof. Ogleznev, and then moved to Chicago where he completed research fellowship and residency in neurosurgery under Drs. Ausman and Dujovny, and fellowship in stereotactic and functional neurosurgery in Portland, Oregon, under Dr. Burchiel. He was also trained in deep brain stimulation with Prof. Benabid in Grenoble and in CT-guided procedures for pain with Prof. Kanpolat in Ankara. Dr. Slavin has been working on staff in UIC since 2001 and went up through the academic ranks to become professor of neurosurgery in 2010.

Prof. Slavin has authored and co-authored almost 200 book chapters and peer-reviewed articles. His book on "Peripheral Nerve Stimulation" was published in 2011; "Principles of Neuromodulation" (co-edited with Prof. Eljamel) came out in 2013; the most recent book on "Stimulation of the Peripheral Nervous System: the Neuromodulation Frontier" was published earlier this year. Currently, he is an associate editor of "Neurosurgery," "Neuromodulation" and "Surgical Neurology International" and editorial board member of several other journals including "Stereotactic and Functional Neurosurgery."

Prof. Slavin is the Past President of the American Association for Stereotactic and Functional Neurosurgery and Director-at-Large (past Secretary) of the North American Neuromodulation Society. He is also an elected Director-at-Large of the International Neuromodulation Society and Vice-Secretary-Treasurer of the World Society for Stereotactic and Functional Neurosurgery. For many years, he served on the Executive Council of Joint Section on Pain of the American Association of Neurological Surgeons and the Congress of Neurological Surgeons. Dr. Slavin is a member of the Medical Advisory Board of the Trigeminal Neuralgia Association and Past President of the Russian American Medical Association. Dr. Slavin has taught extensively on more than a hundred professional educational courses sponsored by national and international societies and device manufacturers. As a sign of peer recognition, he is for many years included in the lists of "Best Doctors in America" and "US Top Surgeons" and has been awarded prestigious "Patients' Choice" and "Most Compassionate Doctor" awards. In addition to his US professorship, he was awarded the title of Honorary Professor in the Burdenko Neurosurgical Institute in Moscow in March of 2016.

Prof. Slavin is married and has two children. He and his family live in Chicago.

CONGRESS INFORMATION

THE VENUE

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5 km from bars and restaurants in the city centre
6 km from IFEMA exhibition centre
11 km from Madrid Barajas International Airport

ACCESS

By plane:
The airport Adolfo Suarez Madrid-Barajas is located 12 kilometers from Madrid. You will be able to reach the city-center by bus from the airport in only 30 minutes.
The underground line 8 (Nuevos Ministerios-Aeropuerto T4) serves the airport Adolfo Suárez Madrid-Barajas Terminal 4 in less than 20 minutes, and can also reach the other terminals of the airport in 12 minutes.

By train:
Madrid is reachable by train from all destinations in Spain, and as well as from destinations in Portugal and France. Indeed, 2 train lines are linking 2 European cities to Madrid: Lisbon & Marseilles.
Madrid (Chamartín)-Lisbonne (Santa Apolonia) : the Trenhotel Lusitania train is serving everyday, lasts for 9 hours & 5 minutes
Madrid (Puerta de Atocha)-Marseilles (Saint Charles) : between the two destinations a high speed train is serving everyday, lasting for 7 hours with stops to few cities in France (Perpignan, Narbonne, Béziers, Montpellier, Nîmes, Avignon et Aix-en-Provence). You can click on the link to search timings & fares.

By bus:
Thanks to the diverse bus routes, Madrid is accessible to all Iberian Peninsula, to Europe and to North of Africa.

By car:
Highroads, fast and radial roads to get to Madrid.
Spare time @ the airport:
During your spare time in the Adolfo Suarez Madrid-Barajas airport, you will be able to enjoy its wide shop area.

Express buses:
The airport has an express service to get you in the city-center by bus in only 40 minutes.

GENERAL INFORMATION

CLIMATE AND CLOTHING

You will be surprised by the blue sky, intense and bright.
In Madrid, the climate is dry with a few precipitations during the year and Hot summers et cold winters The hottest months are the summer period (June to August), although May and September have averages of about 25°C also.

ELECTRICITY

Electricity used in Spain is 220 Volts; The electric plug has two round pins. Plan to bring a transformer for your electrical or electronic equipment using different voltage.

CURRENCY

EUR (€) is the official currency in Spain. Money can be changed at the main train stations, international airports, major banks, exchange bureau, most large hotels and the post office. All major credit cards are accepted in most hotels, restaurants and shops.

SHOPS OPENING HOURS

It begins from 9/10 a.m until 8/10 p.m particularly in the city center.
Some shop are closed at midday in between 2 p.m and 4/5 p.m

UEMS ACCREDITATION

XXII Congress of the European Society of Stereotactic and Functional Neurosurgery
Venue: Madrid, Spain (28.09.–1.10.2016)
Event code: 14603
was granted 15 European CME credits (ECMEC) by the European Accreditation Council for Continuing Medical Education (EACCME).
The XXII Congress of the European Society of Stereotactic and Functional Neurosurgery,is accredited by the European Accreditation Council for Continuing Medical Education (EACCME) to provide the following CME activity for medical specialists. The EACCME is an institution of the European Union of Medical Specialists (UEMS),www.uems.net.
The XXII Congress of the European Society of Stereotactic and Functional Neurosurgery is designated for a maximum of 15 hours of European external CME credits.
Each medical specialist should claim only those hours of credit that he/she actually spent in the educational activity.
Through an agreement between the European Union of Medical Specialists and the American Medical Association, physicians may convert EACCME credits to an equivalent number of AMA PRA Category 1 Credits™.
Information on the process to convert EACCME credit to AMA credit can be found at www.ama-assn.org/go/internationalcme.

WEDNESDAY 28 SEPTEMBER // PRE CONGRESS SYMPOSIUM

16:00-18:30 **MEDTRONIC** *AUDITORIUM*

Chairs: Prof Jean-Marie Régis (France), Prof Juan Antonio Barcia (Spain)

Partnering in Neuroscience - ***Lothar Krinke (Medtronic)***

Structural MRI & advanced imaging techniques (DTI/fMRI) in surgery for movement disorders - ***Mr Ludvic Zrinzo (UK)***

Advancing patient specific DBS therapy through visualization of probabilistic stimulation maps - ***Dr Martin Reich (Germany)***

From specific physiomarkers to first closed loop applications - ***Prof Nick Ramsey (The Netherlands) & Steve Goetz (Medtronic)***

THURSDAY 29 SEPTEMBER // LUNCH WORKSHOP

12:00-13:30 **BOSTON** *ROOM HIDALGO*

RESHAPING DBS – A NOVEL APPROACH TO DIRECTIONAL STEERING

Moderated by: Stephan Chabardes (Grenoble, France), Veerle Visser-Vandewalle (Cologne, Germany)

WELCOME

Directional Steering – What's needed in the IPG? (MICC Patent). ***Stephen Carcieri, Ph.D. (Boston Scientific, United States)***

First Clinical Experience with Chronically implanted Vercise™ Cartesia™ Directional Lead. ***Claudio Pollo (Bern, Switzerland), Veerle Visser-Vandewalle (Cologne, Germany)***

FRIDAY 30 SEPTEMBER // LUNCH WORKSHOP

12:00-13:30 **ELEKTA** *ROOM HIDALGO*

"LATEST INNOVATIONS IN IMAGE-GUIDED FUNCTIONAL NEUROSURGERY"
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WELCOME

Rolf Kjellström, Vice President Neuroscience Sales and marketing; Elekta

SESSION 1: EXPLORING THE USE OF MRI IN I DBS SURGERY

Dr Ludvic Zrinzo, Senior Lecturer and Consultant in Neurosurgery, National Hospital for Neurology and Neurosurgery, Queen Square, London, UK

SESSION 2: LGK ICON: TREATING THE FULL SPECTRUM FROM MACRO- TO MICRORADIOSURGERY

Prof. Jean Regis, Head of the Stereotactic, Functional Neurosurgery and Radiosurgery Department. La Timone Hospital, Marseille, France

Q&A AND CONCLUDING REMARKS ***Rolf Kjellström, Vice President Neuroscience Sales and marketing; Elekta***

12:00-13:30 **BRAINLAB** *ROOM TAPICES*

12:00 - Moving Deep Brain Stimulation forward – stereotaxy applications with Brainlab Elements and AIRO intraoperative CT.
Dr. Katharina Faust, Charité Universitätsmedizin Berlin, Germany

12:30 - DTI assisted Deep Brain Stimulation. ***Prof. Dr. Volker Coenen, University Clinic Freiburg, Germany***

13:00 - Advancements in planning and postoperative assessment with Brainlab Elements. ***Dr. Balint Varkuti, Brainlab AG, Feldkirchen, Germany***

12:00-13:30 **ST JUDE** *ROOM PRADO*

CONTROVERSIES IN DBS - THE GREAT DEBATE

AS TECHNOLOGY ADVANCES WITH LEADS, IMAGING AND TARGETING, IS MER STILL AN IMPORTANT PART OF THE DBS PROCEDURE?

Moderator: Prof. J. Vesper (University Clinic, Dusseldorf, Germany)

Speakers: Prof. V. Visser-Vandewalle (University Clinic, Cologne, Germany), Mr. J. Hyam (National Hospital for Neurology and Neurosurgery, London, UK)

Speaking in favor of MER. ***Prof. V. Visser-Vandewalle***

Speaking against MER. ***Mr. J. Hyam***

Initial experience with the St. Jude Medical Infinity™ DBS System. ***Prof. J. Vesper***

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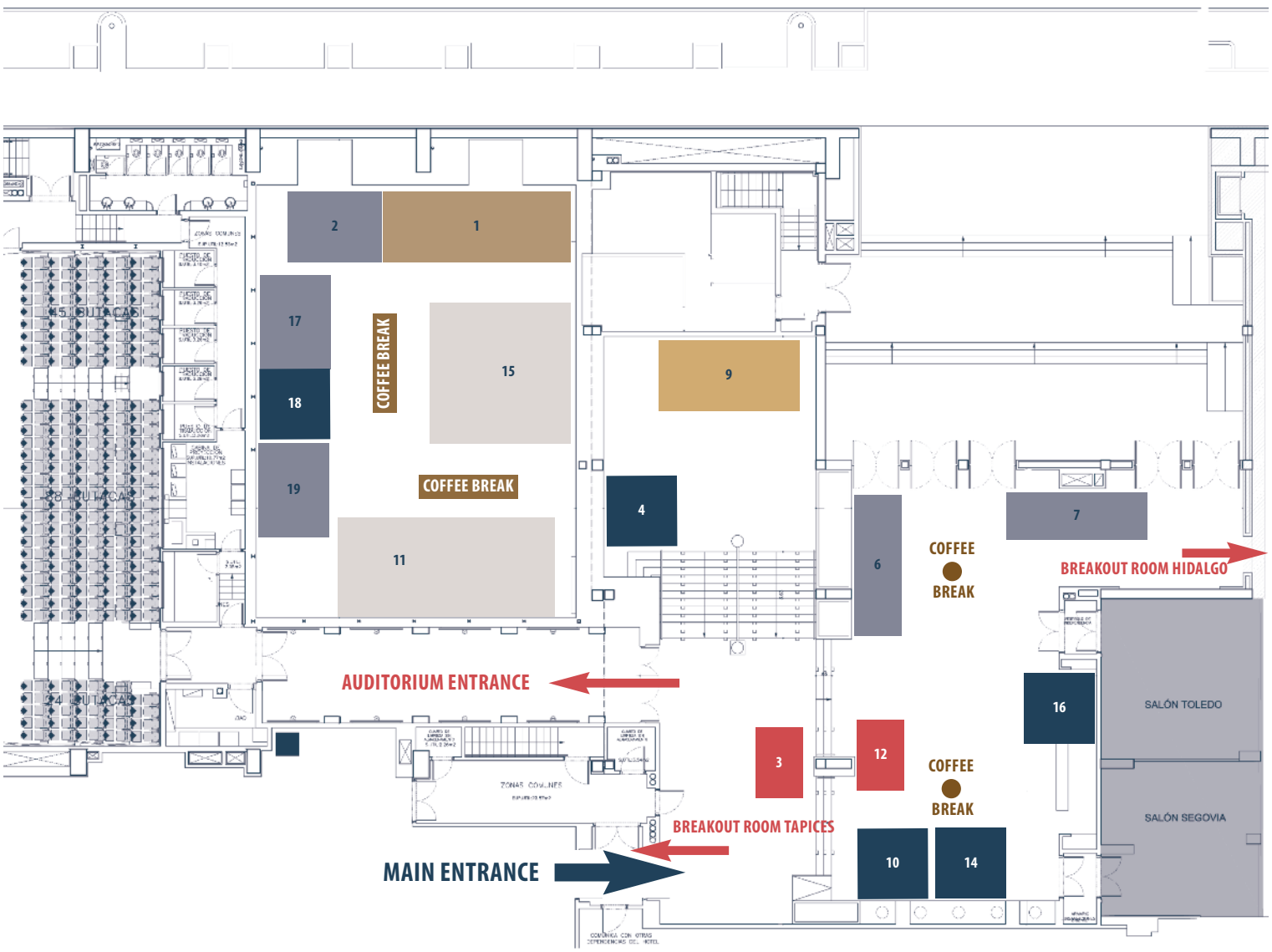

EXHIBITION

BOOTH	COMPANY NAME
19	ALPHA OMEGA
16	AUTONOMIC TECHNOLOGIES
7	BIOINDUCTION
2	BOSTON SCIENTIFIC
1	BRAINLAB
17	ELEKTA
6	FHC
10	INOMED
18	INSIGHTEC
3	KARGER
15	MEDTECH
9&4	MEDTRONIC
12	NEUROSTAR
14	RENISHAW MAYFIELD
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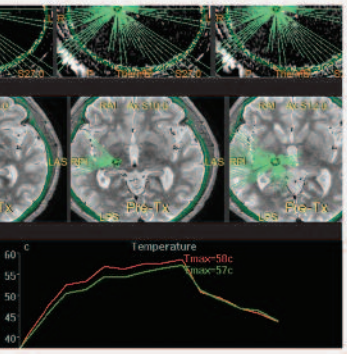
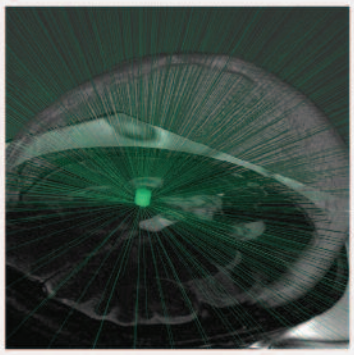
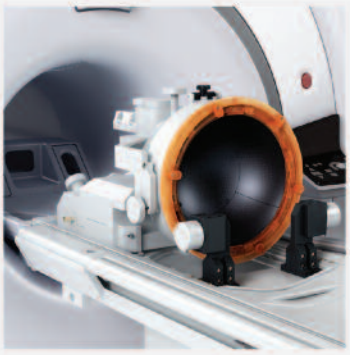
Thalamic stimulation using the Boston Scientific Vercise™ PC DBS System is indicated for the suppression of tremor not adequately controlled by medications in patients diagnosed with Essential Tremor or Parkinson's disease.







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