

EUROPEAN SOCIETYFOR STEREOTACTICAND FUNCTIONALNewsletterNo10Neurosurgery

PRESIDENT'S MESSAGE

Dear Colleagues,

I would like to thank the ESSFN members for their confidence in electing me as President of this significant and historical Society. It is a great honor, responsibility and privilege to serve in a position, in which highly esteemed colleagues served in the past, neurosurgeons who contributed enormously to stereotactic and functional neurosurgery and to the Society.



During the past eight years, I had the opportunity to serve in the Board, initially, as Second Secretary and, subsequently, as Secretary. This has been an enriching period that provided me a deeper and thorough understanding of

the ESSFN affairs. During the first four years, I was educated in matters of the Board by collaborating closely with eminent figures of Stereotactic and Functional Neurosurgery, such as Yves Lazorthes and Giovanni Broggi, who through their work defined the past of our specialty and shaped the path of progress that we walk today.

The subsequent four years have been a period of great progress for ESSFN. I am particularly indebted to our past President, Joachim Krauss, for his guidance, collaboration and friendship that prepared me well for my current position. It was a result of his vision and diligence that ESSFN facilitated positive developments in numerous important areas. Aided by the other officers, Joachim Krauss had a crucial role in establishing the relationship of ESSFN with WSSFN in a way that strengthens both Societies, the adoption of our official journal, the development of Training Charters of Added Competence, the expansion of the Educational Program and the increase of membership.

I would like also to express my deep appreciation to Prof Bart Nuttin, our past Treasurer, for the excellent manner he conducted the duties of the Treasurer and his continuous insightful contribution all these years in the Board, and last but not least for his warm friendship and unreserved support.

During the General Assembly in September 2014 in Maastricht, a new Board of Officers was elected with Antonio Gonnalves-Ferreira as Vice President, Jean Regis, as Secretary, Rick Schuurman as Treasurer, and Jocelyne Bloch as Second Secretary. In recent years, I have collaborated very productively with both the existing and new Board members and look forward to working with them.

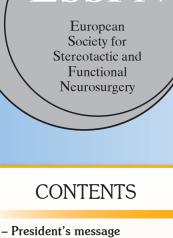
All these years, I also had the privilege of working closely with the Executive Committee members. I would like to thank the colleagues who retired namely Serge Blond, Michiel Staal, and Bengt Linderoth, and wish them all the very best in their personal life and professional endeavors. At the same time, it gives me a great pleasure to welcome the new members in the Executive Committee, namely Alexandre Campos (Portugal), Stephan Chabardes (France), Claudio Pollo (Switzerland), Gaston Schechtmann (Sweden), and Yasin Temel (The Netherlands). ESSFN is continuously expanding. I am delighted that one more European country, Ukraine, will be represented from now on in the Executive Committee with Dr. Kostantin Kostiuk being its representative (please read a report in this issue).

The new Board has the task of taking the Society forward. In my position as President, in close collaboration with the members of the Board and the Executive Committee, I aim to increase our membership, expand our educational program, strengthen all our successful initiatives, collaborate with relevant societies and serve the aims of ESSFN to the best of my ability.

In this spirit, the Educational Program gets enriched and expanded. We intend to run in a parallel, but integrated manner, two series of courses namely: a) the traditional Hands-On Courses that used to take place biannually in Autumn and b) the newly-established Teaching Courses in a four-year cycle. Under the guidance of Prof Jean Regis, Chairman of the Educational Committee, the new program commenced, in a highly successful manner, with the Course on "Fundamentals of Stereotactic and Functional Neurosurgery" (Marseille, April 2014). We are looking forward to the next Educational Course, which will be organized by Jocelyne Bloch in Lausanne in Spring 2015 and to the Radiosurgery Course to be organized by Jean Regis in Marseilles in Autumn 2015 (see adverts in this issue).

The XIst ESSFN Congress 2014 in Maastricht has been another great success creating new record in terms of attendance, scientific quality and financial benefit to the Society. Special thanks go to the Chairman, Yasin Temel, and the other members of the Organizing Committee. We are already looking forward to our next Congress 2016 in historical Istanbul, the great city, also named Constantinople.

It is a fortunate circumstance that our Past President is also the President of WSSFN; this will make easier the collaboration between ESSFN and WSSFN in the years to come. We wish him every success and look forward to the Interim Meeting this year (see advert) and to the WSSFN Congress 2017, in Germany.



- 2 - Secretary's message Treasurer's message 3 – Jean Siegfried. Obituary 4 - XXI ESSFN Congress Report, Maastricht, 2014 **ESSFN Grants and Awards** 2014 5 - 2012 Research Grand Recipient Report 2014 Research Grand Recipient Message 6-7-8 - Minutes, ESSFN General Assemply 2014, Maastricht, The Netherlands 9 - XXII ESSFN Congress 2016, Istanbul, Turkey 10 **ESSFN** Training Courses, 2015. Lausanne, Spring -
- Marseilles, Autumn
- 11

1

- Functional neurosurgery in Ukraine, K. Kostiuk
- 12
 - WSSFN Interim Meeting 2015
 - Journal Stereotactic and Functional Neurosurgery

On a sad note, Jean Siegfried, one of the most respected and influential members the Society, recently passed away. He will be sorely missed (see obituary in this issue). Finally, I would conclude by making a brief reference to the Lasker Award that was bestowed to Prof Alim-Louis Benabid. This important recognition of the work of one of our most esteemed members reflects on the Society as a whole. Looking back on the achievements of the members of ESSFN, we feel proud and appreciate our great responsibility to continue, to keep up the pace and take things forward in a positive, constructive and creative manner. This requires the contribution of each and every one of us. I count on your continued contribution and support.

> Damianos E. Sakas President ESSFN

SECRETARY'S MESSAGE

Dear friends,

2015 begins with a new board of officers. Maastricht was an extremely successful meeting from all points of view. Our congresses of the ESSFN may be the world's foremost gathering of leaders in Functional Neurosurgery! We inspire and facilitate scientific discovery and provide career development opportunities for young neurosurgeons to become leaders and innovators in the field. We have inherited this previous legacy from our prestigious predecessors. We must especially pay tribute to both Joachim Krauss and Bart Nuttin, who were respectively President and Treasurer. Both have achieved outstanding work. J Krauss, by dramatically improving our relationship with WSSFN and our journal Stereotactic and Functional Neurosurgery, has been instrumental in a real move forward for our society. We can already say that very few presidents have created such momentum for our society. Bart Nuttin was a great work colleague and a remarkably rigorous and effective treasurer. They have raised a very high standard for the "new team" in charge of steering our society for the 4 upcoming years with the Executive Committee members.

The decision was taken by the president and the board of officers, during the board meeting held in Cascais in September 2012, to reorganize the educational activities of the ESSFN in a comprehensive program covering the whole field of Stereotactic and Functional Neurosurgery. The previous traditional courses will be integrated into this cycle of courses.

It is considered that no primary training provides all the necessary knowledge and expertise to ensure quality and safety in this specific field of neurosurgery, without targeted training arrangements. Therefore it is mandatory that additional competence be acquired by both a specific "theoretical" training (including whenever possible hands-on sessions), and through a fellowship of predefined duration in an appropriate institution.

Our aim is to ensure the high standards required for the practice of Stereotactic and Functional Neurosurgery.

With the current mission ESSFN also aims to incorporate requirements that have been specified according to the charters for superspecialization published in cooperation with UEMS. Furthermore, efforts will be made to coordinate activities with EANS, in particular the recently launched functional section of EANS.

I have been asked to create and lead a dedicated committee. The following committee has been proposed to the board of officers and has been approved: Marwan Hariz (UK), Jorge Guridi (Spain), Angelo Franzini (Italy), Jocelyne Bloch (Switzerland), Stephan Chabardes (France), Massimo Sceratti (Italy) and Gaston Schechtman (Sweden). Massimo Sceratti will ensure good coordination with the educational activities of the EANS. The entire program is spread over a period of 4 years and divided into 6 modules organized independently. The module organized in collaboration with Professor Van Roost was a great success both



in terms of attendance, and in quality of the lectures and hands-on sessions. The first module of the new format was dedicated to "Basics", and took place in Marseille, April 28th-30th, 2014. The next course dedicated to clinical research and Psychiatric disorders surgery will take place in Lausanne, 11-13 May 2015. For more information and registration, a website is already open at the following address: http:// essfntrainingcourse.mcocongres.com/en/lausanne2015.

The cycle of courses of this European program is open to neurosurgeons having completed or almost completed their residency and having paid their membership to the ESSFN. Members of the ESSFN from outside Europe are also eligible. In the case of the number of demands exceeding the capacity of the course, priority will be given to European neurosurgeons and to those who have completed their residency.

After completing each module, participants will receive a certificate. Furthermore, if all modules have been taken, the creation of an official European Functional Neurosurgery ESSFN diploma is being considered. In addition to the theoretical training, candidates will be provided with the opportunity to spend 1 year in a neurosurgical department with qualified Stereotactic and Functional Neurosurgery as specified by a number of criteria for eligibility. We are very much looking forward to welcoming in Lausanne young neurosurgeons interested in entering the ESSFN educational program.

In my new position of secretary, one of my missions is to be at the disposal of all members of the ESSFN or members of the executive committee who have suggestions or demands for the board. Therefore, please do not hesitate to contact with me by e-mail (jregis@ap-hm.fr). Serving our prestigious, dynamic and creative society is a privilege and we will do all our best to meet your expectations.

Jean Regis Secretary, ESSFN

TREASURER'S MESSAGE

This treasurer's report should start by expressing sincere gratitude to Bart Nuttin, who took care of the treasury of the ESSFN during the past eight years. Under his guidance and control the financial situation of the Society has become very healthy and stable indeed. Steady income is generated from the membership fees, which required some gentle nudging at times to remain constant, and from the benefits of the ESSFN conferences, through registration fees of the 650+ attendants and contributions from industry. The last ESSFN conference in Maastricht was very successful in the exchange of scientific content, but also further enhanced the financial security of the Society.

The funds are used with diligence to support the educational activities of the ESSFN, to promote research in the field of functional neurosurgery by awarding the ESSFN research grant bi-annually during the conferences, and serve as security for the continuation of organizing the conferences. Furthermore, part of the membership fees serve as contribution to the World Society of Stereotactic and Functional Neurosurgery, of which all ESSFN members are automatically member, and finally all paying members of the ESSFN receive online access to the journal Stereotactic and Functional Neurosurgery.

I thank the members for entrusting me with the responsibility for the treasury of the ESSFN for the

coming years, and will continue the work of my predecessors in guarding the financial position of the Society, so that we can continue to strengthen our ties of friendship and professional collaboration.

> Rick Schuurman Treasurer, ESSFN

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OBITUARY

JEAN SIEGFRIED (1931 – 2014)

Jean Siegfried was one of the pioneers in stereotactic and functional neurosurgery. He was an outstanding representative of the second generation of neurosurgeons who were pupils of the founding giants in the field like Leksell, Riechert, Talairach, to mention a few. Siegfried lived and worked all his life in Zurich, and in the early 1960s he began to practice and further develop stereotactic neurosurgery at the University Hospital (Kantonspital). For many years, he was the leading neurosurgeon in that field in Switzerland. Siegfried soon gained an international reputation and he took active part in a number of international meetings. He was a member of the board of directors of several scientific societies and of the editorial board of medical journals. In 1981, he hosted in Zurich a meeting of the World Society for Stereotactic and Functional Neurosurgery. Siegfried's profe



the World Society for Stereotactic and Functional Neurosurgery. Siegfried's professional contributions were awarded by several prizes, among them the prestigious Otfried-Foerster Medal in 2003.

Jean Siegfried was born in Geneva where he went to school and also completed his medical studies in 1956. He practiced as "house surgeon" in French Hospital in London in 1957-8, conducted scientific studies in Strasbourg in 1959, obtained clinical and research fellowships at Montreal Neurological Institute (T. Rasmussen & H. Jasper) and at Massachusetts General Hospital 1962 (W. Sweet). In 1961 he presented a thesis in Geneva and became assistant doctor at the Neurosurgical Unit in Kantonspital in Zurich. In 1966, he became specialist in neurosurgery, and in 1969 he was nominated as "Privat Dozent" after having presented a survey study on Parkinson's disease and its treatment. In 1975, he was given the title of Professor at the Zórich University. Jean Siegfried was for many years one of the most prominent members of the neurosurgical staff of the Kantonspital and had a solid international reputation. From 1986 till 2001, he moved his neurosurgical activities to a private Zurich hospital, Klinik im Park.

Siegfried's scientific production reflects his wide interest in most techniques and indications for stereotactic and functional neurosurgical interventions. Most of his publications were produced the period 1970-1995. The first articles in early 1960s were produced in Boston, where he spent some time with the famous pain surgeon William Sweet, on stereotactic lesions produced by cold and applied in the treatment of choreo-atethosis. In the late 1960s, he published several papers together with Hugo Krayenbuhl, the well-reputed head of the Zurich neurosurgical unit. Of particular interest are some publications on stereotactic cerebellar surgery (dentate nucleus) for hyperkinetic disorders. It should be recalled that such surgery was not, in general, useful until much later, in the mid and late 1970s. This is an example of Siegfried's original and innovative mind in embarking upon new applications of available surgical techniques. He had a special interest in what was then often referred to as cerebral palsy and this topic was surveyed in an extensive article together with Yves Lazorthes and Giovanni Broggi published in 1985.

It should be noted that Siegfried was one of the pioneers in applying DBS both for chronic pain and for movement disorders. He had always a keen interest in pain and he wrote several articles on pain physiology and management, in particular surgical treatment options, published in Swiss medical journals. In the 1970s and 1980s he treated a large number of patients with trigeminal neuralgia, and as early as 1977, a series of 500 cases was published. During the period from 1978 till 1985, Siegfried had treated 89 patients with DBS applied in the sensory thalamus for "deafferentation pain", and in 1984, he published a study together with Bertrand Demierre on "thalamic pain" treated by thalamic DBS.

In 1995, Siegfried and Yves Lazorthes reported on the long-term outcome of spinal cord stimulation (SCS) in patients with neuropathic pain treated in Zurich and Toulouse. Although this was a case series study, it was a meticulously performed report of a large number of patients, and for several years it was indeed one of the best clinical SCS studies – the fact that it was published in French made it presumably less often cited than it deserved!

Siegfried had several publications on surgical treatment of Parkinson's disease. Of particular interest is an article in 1991 together with Serge Blond demonstrating the possibility of alleviating both Parkinsonian and essential tremor by thalamic DBS. It should be recalled that this was the same year when the first paper on DBS from the Grenoble group was published. Another pioneering study by Siegfried was one published together with Bodo Lippitz in 1994 reporting for the first time on the effect of DBS applied in the pallidum in Parkinson's disease. In 1997, he published together with Serge Blond a book on the neurosurgical treatment of Parkinson's disease and other movements disorders.

During the last years of his professional life, when Siegfried worked at a private hospital, he was the first in Switzerland to have access to a "gamma knife". As judged from his publications from these years (1998-2001), he performed stereotactic radiosurgery predominantly on acromegaly and brain metastases.

No doubt, Jean Siegfried's scientific production is impressive and it mirrors a broad interest and expertise in many aspects of his field - it also exposes an innovative and creative surgical mind.

Jean Siegfried had many interests beside his professional life. He was a knowledgeable collector of modern art and a music lover. He was also an active and clever skier.

Siegfried was a warm, social and generous person who was always ready to share his ideas and experiences with colleagues and friends. He had a charming humour and a ready wit. Those of us who had the privilege of knowing Jean, more closely than just professionally, keep many memories of most enjoyable times spent together with him.

Serge Blond, Lille Giovanni Broggi, Milano Yves Lazorthes, Toulouse Bjorn Meyerson, Stockholm

XXI ESSFN CONGRESS REPORT, MAASTRICHT, 2014

Dear colleagues and friends,

The XXI congress of the ESSFN took place in Maastricht, only a few months ago. This congress had two unique aspects. It was decided for the first time to give a congress a special topic. The topic of the Maastricht meeting was defined as "Implementing research in clinical application". The organizing committee invited speakers from different parts of the world who discussed their latest research results, shared their opinions, and documented their clinical experiences and challenges. Due to this special topic, a high number of science-based abstracts were submitted along with a large number of high-quality clinical abstracts. This way of combining science with clinics, which is especially suitable for our field, has resulted in an excellent educational level. Besides the favorable outcome in terms of the content, quantitative outcome parameters were also positive. The meeting hosted 698 attendees from 51 different countries. A high number of companies were attracted as well. From an organizational point of view, I can conclude that the congress was a great success, continuing the tradition of the ESSFN.

The second unique aspect was that this was the first time that the congress was organized in the Netherlands. We demonstrated some of the typical Dutch scientific, clinical, and cultural details, by



a variety of lectures and social events. I hope that the delegates have found time to visit the key historical and modern areas of Maastricht.

I am looking forward to the 2016 ESSFN congress in Istanbul, a great city, and wish the organizer, Ali Savas, a lot of success. I am convinced that he and his team will realize another fantastic ESSFN meeting.

Yasin Temel

ESSFN GRANTS AND AWARDS 2014

During the ESFFN Congress 2014 that took place in Maastricht, The Netherlands we had the opportunity to appreciate the contribution of our younger colleagues. Their work was evaluated by the various committee and receive the ESSFN awards that are described below: a) the Research Grant, b) the Best Publication Award on DBS (sponsored by Medtronic), c) the Best Oral Presentation Award, and d) the Best Poster Award. The Committees of colleagues who selected the contributions to be awarded, the names of the awardees and	
the titles of the works that received the awards are described below.	
Research Grant Committee: A. Lozano, Y. Lazorthes, G. Broggi Hemmings Wu (Leuven, Belgium) Implementation of adaptive deep brain stimulation in an animal model of obsessive-compulsive disorder	(€ 20.000)
Best Publication on DBS Awards Committee: A-L Benabid, R. Schuurman, A. Gonnalves-Ferreira Ali Jahanshahi (Maastricht, The Netherlands) Electrical stimulation of the motor cortex enhances progenitor cell migration in the adult rat brain (Exp Brain Res, 2013) Sandra Boccard-Binet (Oxford, UK) Targeting the affective component of chronic pain: a case series of deep brain stimulation of the anterior cingulate cortex (Neurosurgery, 2014)	(2 x € 3000)
 Best Oral Presentation Award Committee: A. Savas, D. van Roost, G. Schechtmann Katie Bates, Marwan Hariz, Kostas Kostarelos (London- Manchester, United Kingdom) Long-term Functional Recovery of Rodent Hemiparkinsonism by Carbon Nanotube-mediated siRNA 'Genetic Lesioning' of the Subthalamic Nucleus. Laura Cif, Jocelyne Bloch, Etienne Pralong, Bogdan Draganski (Lausanne, Switzerland) Delineation of the nucleus accumbens: targeting for deep brain stimulation. 	(2 x € 1000)
 Best Poster Presentation Award Committee: J. Guridi, J. Bloch, I. Valalik E. Talamoni Fonoff, W. Omar, C. Lopez et al (Sao Paolo, Brazil) Simultaneous bilateral MER-guided stereotactic implantation of DBS electrodes L. Partington, M. Silverdale (Saltford, UK) A case series of dopamine agonist withdrawal syndrome following deep brain stimulation for Parkinson's disease J. Volkmann, F. Steigerwald et al. (Wurzburg, Germany) Deep brain stimulation at short pulse width results in superior therapeutic windows for treatment of Parkinson's Disease: a randomized, controlled double-blind neurostimulation trial (CUSTOM-DBS) 	(3 x € 500)

2012 ESSFN RESEARCH GRANT RECIPIENT REPORT

Dear colleagues and friends,

We received the ESSFN Research grant 2012. The title of our research proposal was "Neurostimulation to promote recovery". In the last two years, we have conducted a set of experimental studies. We were able to publish two papers from these findings. The project and the main findings are summarized below.

Summary: Clinical and animal studies suggested that epidural stimulation of the motor cortex (MC) can improve neurological deficits induced by stroke. The mechanisms involved in stimulation-induced recovery are not well understood and might involve neurogenesis-related processes. Here, we addressed the question whether MC stimulation influences processes of differentiation, migration and differentiation in an animal model. We implanted epidural stimulating electrodes at the level of the MC in rats and applied electrical current for a period of one month. We found increased proliferation in the subventricular zone. Interestingly, stimulation

also influenced the migration of newborn cells and we found evidence for enhanced migration towards the source of the current, a process known as electrotaxis. Some of these cells also expressed the neuronal marker, NeuN. In addition, our results suggest that MC stimulation enhances the neuronal activity of the dorsal raphe nucleus, leading to an increase in the expression of 5-hydroxytryptamine in the subventricular zone. It is known that such an increase can boost formation of new cells in the subventricular zone. Our findings suggest that epidural MC stimulation influences neurogenesis-related processes which might be one of the mechanisms responsible for the therapeutic effects.

obsessive-compulsive disorder", was awarded the 2014 ESSFN Research Grant in Maastricht, the Netherlands. It is truly a great honor for us, and we would like to take the opportunity to share with you some of the aspects of our research proposal here in the ESSFN Newsletter.

pain and movement disorders by delivering electrical current to specific brain structure. Nuttin et al. first reported its clinical efficacy for obsessive-compulsive disorder (OCD) in 1999. Data from different research

The aim of the project is to improve the current treatment of DBS for refractory OCD by implementing closed-loop deep brain stimulation and recording technology. We hypothesize that adaptive DBS (aDBS), which detects real-time neural biomarkers (in the form of LFPs) in the limbic system, such as the bed nucleus of the stria terminalis (BNST), to steer electrical stimulation, is more effective than conventional open-loop DBS in terms of compulsion suppression when applied in the rat scheduleinduced polydipsia (SIP) model, an animal model of OCD.

Electrodes will be implanted at BNST bilaterally in rats prior to SIP conditioning. After induction of compulsive behavior, each rat will undergo aDBS, open-loop DBS, randomly-applied DBS, and sham in a crossover (washout period in between), random design. The primary outcome of this experiment is the water intake during SIP conditioning, which directly reflects the degree of compulsive drinking behavior. The secondary outcomes include behavioral data extracted from video recording (e.g. travel pattern uniformity, a parameter which can indicate the level of similarity of travel pattern). We will compare primary and secondary measurements of different interventions to test our hypothesis.

This is a preclinical research project, representing one of the early attempts to use real-time neural input and closed-loop technology to treat psychiatric indications. If this study proves DBS for OCD as an effective intervention in an animal model, we will move on to explore possible clinical application of this technique in refractory OCD patients.

We look forward to bring you more details about the experimental results in Istanbul, Turkey, in 2016.

Hemmings Wu

Research Group Experimental Neurosurgery and Neuroanatomy KU Leuven, Leuven, Belgium

2014 ESSFN RESEARCH GRANT RECIPIENT MESSAGE

Dear colleagues,

Our research proposal, entitled "Implementation of adaptive deep brain stimulation in an animal model of

Deep brain stimulation (DBS) is a neurosurgical technique, which was first introduced to treat refractory centers worldwide showed positive results in DBS for refractory OCD.







PROCEEDINGS of the ESSFN GENERAL ASSEMBLY September 19, 2014, Maastricht, The Netherlands

The meeting is opened by the President Joachim Krauss at 16:30 pm.

Minutes of the General Assembly in Maastricht, The Netherlands (September, 2014)

The minutes of the General Assembly in Maastricht, The Netherlands, 2014, are approved.

President's report

The President welcomes the members of the Society and announces that he is going to leave the Board, as his four-year period of presidency has been completed. He thanks the members for their work and contribution to the Society affairs. The President continues by informing the members that Bart Nuttin, the Treasurer, will also leave the Board, and that he would comment on this later on, during his report to the Assembly.

The President continues by making a few general comments to the members on the Educational Program. He expresses the appreciation of the Society to Dirk van Roost for the organization of the excellent Hands-On Course on Epilepsy Surgery in Ghent (October 2013) for a second time. He underlines the high scientific standards that were met during this Course and comments that van Roost is likely to be asked to organize the same Course for a third time in the next few years. Furthermore, the President announces that the new Educational Program would consist of two series of courses that will run in parallel: a) the traditional *Hands-On Training Courses* that would continue to take place in the Autumn of each odd year (but not in the Autumn of the even years when the Society's Congress takes place) and b) the newly-established *Teaching Courses* that would take place annually, in the Spring of every year and in the Autumn of the odd years.

The President continues by making a few comments on the Research Grant and the Best Publication on DBS Awards 2014. He informs the Assembly that there had been a considerable number of applications of high scientific caliber for both awards and thanks the members of the Selection Committees of the above two Awards, namely Drs Andres Lozano, Yves Lazorthes and Giovanni Broggi (Research Grant) and Drs Alim-Louis Benabid, Rick Schuurman and Antonio Goncalves-Ferreira (Best Publication on DBS).

The President comments positively on the agreement between ESSFN and WSSFN according to which, all members of ESSFN become members of the WSSFN, as well. Moreover, he announces that the WSSFN Interim Meeting will take place in Mumbai, India (September 3-6, 2015). The President comments positively on the 'strategic partnership' of the Movement Disorders Society and WSSFN aiming to give fresh impetus to the evaluation of PPN as a target in movement disorders, which is signified by the creation of the 'MDS-WSSFN PPN DBS' Working Group. Furthermore, speaking in his capacity of being both President of ESSFN and WSSFN, underlines the challenges that the Board of WSSFN, an international society, faces in order to integrate constructively the aspirations, expectations and points of view of colleagues from different continents and cultural backgrounds.

On the relationship of ESSFN with EANS, the President points out that both sides have recently signed a "contract of collaboration". He comments on the progress that has been made and stresses that the new Board will need to work diligently in order to revise the framework of the relationship of the two Societies In this context, he expresses his general concern with regard to defining the role and the proper function of the EANS Section of Stereotactic and Functional Neurosurgery and on how this initiative of EANS should develop in the coming years.

With respect to the International Society of Intraoperative Neuromonitoring (ISIN), the President points out that strong ties of scientific cooperation have been cultivated. He adds that, during the ISIN Congress 2013 in Capetown, South Africa, Drs Yasin Temel and Rick Schuurman represented ESSFN as invited speakers.

Then, the President reports on the satisfactory collaboration of the Society with the Journal Stereotactic and Functional Neurosurgery. He mentions that the journal's impact factor is 1.4, one of the highest among neurosurgical journals. The President highlights the initiative of the Historian's Corner, which has already provided valuable historical material that will be part of the ESSFN Archives. He adds that, at present, Dr Marwan Hariz and himself supervise the material that is selected to be included in the Historian's Corner but he encourages the members to submit any material they might have related to the history of our Society (documents, photographs, videos, etc).

With respect to the Training Charters of Added Competence, the President comments that the Charter on Epilepsy Surgery Added Competence has already been published in Acta Neurochirurgica, while considerable progress has been made in the production of the Charter on Spasticity Surgery Added Competence.

Finally, the President comments on the prestigious Lasker Award that was bestowed to Prof Alim-Louis Benabid and that this distinction reflects on the whole of the Society. He expresses the appreciation and extends the wishes of all members to Prof Benabid for health and every success in his endeavours.

Secretary's Report

The Secretary informs the members on the steady increase of membership and that the current number of paying members exceeds the 290. The Secretary also comments on the positive development with regard to the ESSFN Research Grant and the ESSFN Awards. There have been numerous applications for the Research Grant and the Best Publication on DBS Award. All the ESSFN Awards were announced via the Newsletter, while a letter of invitation was also sent to all Executive Committee members kindly asking them to encourage colleagues from their countries to submit proposals for the various ESSFN Awards.

The Secretary points out that all colleagues who were invited to participate as members of the Selection Committees of the various ESSFN Awards 2014, accepted the invitation and gave timely their feedback.

The Secretary informs the Board that there has been further progress in the production of the Training Charter on Spasticity Surgery. The comments and suggestions of Drs Jean Regis, Massimo Scerrati, Marc Sindou and Patrick Mertens have been received and will be incorporated into the manuscript, which will be forwarded to the UEMS to take the issue further. The Secretary informs the members that the next issue of the Newsletter No 10 is going to circulate in Spring 2015. It will be an extended edition in order to include, apart from the regularly included material, the obituary to Jean Siegfried, the Minutes of the General Assembly 2014, the reports of the Research Grant Awardees 2012 and 2014, the Congress Report 2014 by Yasin Temel, the welcome message of Ali Savas for Congress 2016 and advertisements of future events such as the forthcoming course on 'Methodological aspects and surgery for psychiatric diseases' in Lausanne, in May 2015.

Finally, the Secretary informs the members that the ESSFN website is running smoothly and all included material has been updated in terms of forthcoming events, events under the auspices of ESSFN, mission, geographical distribution of membership, etc.

Treasurer's report

In the beginning of his report, the Treasurer announces that it is his intention to retire from the Board. He comments on the great opportunity he had to contribute to the Society's affairs and thanks all members for their collaboration over all these years. Then, he informs the members that the current balance of the ESSFN account is 238.000 Euro and that all Society's financial issues are in good order. Bart Nuttin also comments positively on the steadily increasing number of the ESSFN members.

Then, the Treasurer underlines the necessity of the decision taken at the previous Officers' Meeting of keeping in the longterm two active bank accounts of ESSFN, with one of them in a Bank of Toulouse, where the official seat of the Society is located. Furthermore, the Treasurer describes that, currently, the smooth running of the day-to-day business requires ESSFN to possess two accounts, i.e. not only an ordinary deposit account but also a pay-pal account. Bart Nuttin points out that, in his opinion, both of the above accounts will prove useful to the new ESSFN Treasurer.

Then, the Treasurer asks the Financial Audit Committee consisted by Drs Istvan Valalik and Ali Savas to report to the members on the results of their Audit of the Accounts of the Society. Both colleagues inform the members that they have thoroughly reviewed the Financial Books of the Society. They confirm that they found them to be in good order and all reimbursement expenses were in accordance with the By-Laws and the regulations of the Society.

Election of ESSFN Officers/Executive Committee members

The President informs the members that a four-year period of service of the current Board has been completed and, hence, according to the By-Laws, a new Board of officers should be elected. Furthermore, the President informs that the Nomination Committee was originally consisted by Drs Miroslav Galanda and Ioannis Panourias. However, Dr Ioannis Panourias was unavailable and he had excused himself and Dr Ali Savas has kindly accepted to replace him. Dr Savas is invited to the podium and presents the proposal of the Nominating Committee which has as follows:

Two colleagues, i.e. Antonio Goncalves-Ferreira and Jocelyne Bloch, are proposed to replace Joachim Krauss and Bart Nuttin, who leave the Board. The new composition of the Board is proposed to be consisted by: Damianos Sakas as President, Antonio Goncalves-Ferreira as Vice President, Jean Regis as Secretary, Jocelyne Bloch as Second Secretary and Rick Schuurman as Treasurer. At this point, the President asks all members whether any colleague wishes to propose somebody else in the place of the above-mentioned persons or has any objection on the proposed members for the Board. There is no objection from the Assembly. After that, the process continues with a separate voting on each named Officer, and each one is accepted unanimously by the General Assembly. Hence, the above composition of the ESSFN Board is elected by a consensus and unanimous agreement among all members of the General Assembly.

Executive Committee membership

The President informs the members on a very positive development, namely that Ukraine has currently sufficient number of ESSFN members and, hence, it will be represented from nowon in the Executive Committee. Dr Konstantin Kostiuk, who is known to be very active in the field of stereotactic and functional neurosurgery in Ukraine, will be the country's representative in the Executive Committee. At this point, the President welcomes formally Ukraine as the new country to be represented in the ESSFN Executive Committee and Dr Kostiantyn Kostiuk as its representative.

Then, the President announces that a number of members who leave the Executive Committee are going to be replaced by other colleagues. There has been a thorough consideration in the Board and the Executive Committee of the most suitable candidates as new representatives of the colleagues who retire form the Executive Committee. In particular, the President informs the members that Serge Blond is retiring as representative of France and has proposed Stephan Chabardes as the colleague who should replace him in the Executive Committee. With respect to Portugal, Antonio Goncalves-Ferreira has proposed to be replaced by Dr Alexander Campos. With respect to Switzerland, Jocelyne Bloch is proposed to be replaced by Claudio Pollo. With respect to The Netherlands, Yasin Temel is proposed to replace Michael Staal, who is also retiring from his position in the Executive Committee. Finally, with respect to Sweden, Dr Gaston Schechtmann will be the new proposed representative of this country in the Executive Committee.

Then, the President asks the members if they would like to propose any other candidate or have any objection on the proposed colleagues as new members of the Executive Committee. There is consensus and general agreement among the members on the colleagues who were proposed to replace the colleagues who leave the Executive Committee.

Changes in the ESSFN By Laws

The Second Secretary, Rick Schuurman, presents shortly this issue to the members. He mentions that, according to the existing requirements, every new applicant for ESSFN membership should complete the application form and provide a CV and a letter of support by another ESSFN member. The new proposal is that "the recommendation letter" no longer be one of the requirements for membership. Prof Krauss comments that, quite often, the recommendation letter, the application form and CV are submitted to different officers, causing delays in the whole process. The proposed change in the By Laws will minimize this problem and, hence, it is a change in the right direction. All members approve the proposed changes with no objection or any different proposal. It is announced that the revised By Laws will be forwarded to Prof. Yves Lazorthes and Mr Martin, Chartered Accountant, in order to be included in the official documents of the Society.

ESSFN Educational Training Courses

The Presidents comments that, for the time being and until further decisions are made, ESSFN will run two series of courses in parallel: a) the 'Hands-On Training Courses' established since 2004 and b) the newly-designed 'Teaching Courses'. Discussion follows on the most effective educational way these series of courses could be combined. The Secretary reiterates that it is important to combine the two programs in a 4-year cycle and have on odd years one course in the Spring (usually Teaching Course) and one in Autumn (usually, Hands-on Course). He adds that, in his opinion, considering that the ESSFN Congress takes place in even years, the Society should organize only one Course during those years, which would take place in the Spring.

This yearly distribution of Courses is approved and, at this point, Jean Regis, Chairman of the Educational Committee, describes the new educational initiative of ESSFN by explaining its aims and presenting the structure of the new educational program. He points out that the first Teaching Course on the "Basics of Stereotactic Neurosurgery' took place in Marseilles, France last April and was a great success. Furthermore, Regis presents the scientific program of the forthcoming Teaching Course in Lausanne, Switzerland on 11-13 May 2015 with Jocelyne Bloch as the local coordinator. This module is entitled "Methodological aspects and Neurosurgery for psychiatric disorders" and is intended to combine effectively two different topics into one course.

At this point, Prof Meyerson asks why it is useful or practical to maintain two different names or two different series of Courses. The President comments that the series of Hands-On Courses started ten years ago and has been very successful. The Educational Program gradually intensified to reach its present form. The President explains that the decision to combine a successful existing and demanding program of Hands-on Courses taking place biannually with a new program of Courses taking place twice a year created numerous questions on the proper design, logistics, etc. The Officers felt it would be safer to keep the old program and the new program separate for the time being, and combine them in a single integrated program in the future, when all the organizational issues will be addressed.

The Secretary also comments that the Board opted for a gradual expansion of the Educational Program in order to ensure its success. The established Hands-On Courses have been very successful and are intended primarily for qualified neurosurgeons as an introduction to added competence. However, at present, it is not clear whether the new Courses should have the same structure and content or should be intended to a wider audience including trainees in neurosurgery, i.e. targeting a similar audience to that of the EANS Training Committee Program. These issues would be resolved gradually. Jean Regis also comments that he agrees with the rationale of a gradual evolution in the next few years of the two series of Courses into an integrated unified program. Finally, Prof Krauss urges all members of the Executive Committee to actively participate in the Educational Program and address any proposals they might have to Jean Regis, Chairman of the Educational Committee.

ESSFN Congress 2016

Ali Savas, Chairman of the Congress 2016 Organizing Committee, delivers a short address regarding the progress of preparations of this Congress. He informs the members that the Conrad Conference Center, located at the Conrad Hotel in Istanbul has been finalized as the venue of the Congress, a development that, in his opinion, is a great success given the location of the venue and the conference facilities it offers. He stresses that the preparations are progressing and he will do his outmost in order to organize a successful and enjoyable Congress from both scientific and social aspects and, importantly, to ensure affordable accommodation to all members in order not to discourage people to register. Moreover, he expresses his enthusiasm to work in collaboration with the Board towards the success of the Congress. Finally, he comments that many colleagues from Middle East and wider Asia are expected to participate and, hence, the number of delegates, in his opinion, is quite likely to exceed the 700.

Future ESSFN Congresses: 2018 and beyond

The President informs the members that there have been three applications for hosting Congress 2018; two bids, i.e. those of Madrid and Marseilles, were submitted early enough to be thoroughly reviewed and evaluated twice. The third application from Budapest, supported by Istvan Valalik, was submitted just few days before the Congress 2014 and, hence, there was not sufficient time to be evaluated from a financial and organizational point of view. Therefore, the Board decided that only Drs Juan Barcia and Jean Regis should be invited to give a 5-minute presentation to the Executive Committee in order to support their applications of Madrid and Marseilles, respectively, as hosting cities of Congress 2018. The President informs the members that the Executive Committee voted in favor of Madrid as the hosting city for 2018, although Marseilles was an excellent proposal and could be a very strong contender in the future. Juan Barcia is invited by Prof Krauss to address the General Assembly. Dr Barcia expresses his satisfaction and enthusiasm, thanks the members and expresses his commitment to organize a successful Congress and invites all members to Madrid in 2018. Following that, Jean Regis is also invited to the podium. He wishes every success to Dr Barcia and confirms his interest in hosting in Marseilles the ESSFN Congress 2020.

Matters arising

The newly-elected President, Damianos Sakas, makes a short statement on his election and on the contribution of the two colleagues who retired from the Board. He thanks all the members for voting in his favor expressing their confidence in his candidacy as President of this historical, significant and prestigious Society. In particular, he thanks Prof Krauss for his leadership, diligence, and inspiration he provided to the Society and the guidance and whole-hearted support he offered to him. He thanks also Prof Bart Nuttin for his continuous thoughtful advice, warm friendship and unreserved support. He expresses his wishes to both of them for health and every success in their endeavors.

The new President continues by thanking the existing members of the Board, namely Jean Regis and Rick Schuurman for their collaboration, hard work and contribution to the Society and expresses his enthusiasm to work with them and the two newlyelected members of the Board, namely Antonio Goncalves-Ferreira and Jocelyne Bloch. Furthermore, the new President thanks the colleagues who retired from the Executive Committee, welcomes the new members and expresses his intention to work closely with them in order to advance the aims of the Society. Prof Sakas concludes by expressing the wish that all colleagues who retired from their official positions would continue to be active and contribute to the Society's affairs in the future.

Date of next Meeting

The next General Assembly Meeting is going to take place in September 2016, during the XXII ESSFN Congress in Istanbul, Turkey.

XXII ESSFN CONGRESS ANNOUNCEMENT, ISTANBUL, 2016

Dear Colleagues,

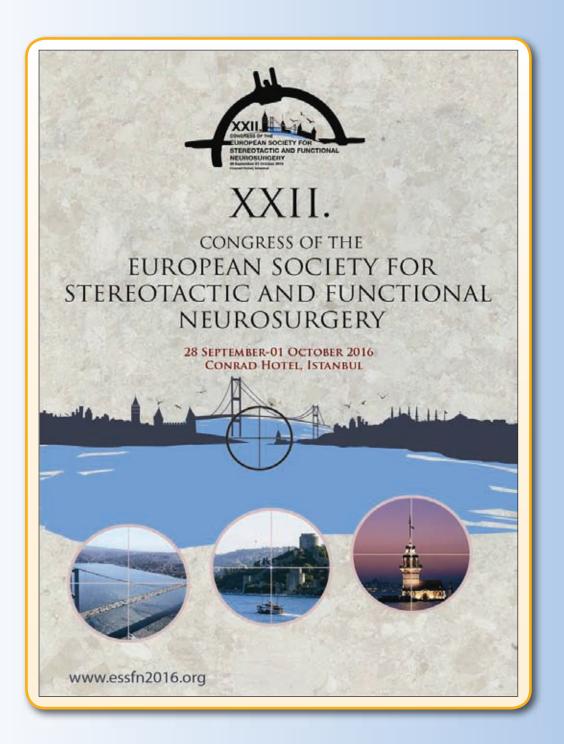
We are pleased to announce the XXII Congress of the European Society for Stereotactic and Functional Neurosurgery (ESSFN 2016) which will be held between 28th September – 1st October, 2016 at the Conrad Conference Center in Istanbul, Turkey. The Scientific Committee will take great care in preparing a diverse program of high quality that will include the latest developments and ideas in basic science and surgery. The Organizing Committee will also try to put together an unforgettable social program during the congress. We believe that ESSFN 2016 will be an excellent opportunity for academic and scientific exchange among the specialists who work in neurosurgery from all around the world, especially at the reasonable and attractive costs that we are committing ourselves to ensure for the participants. As a congress city, Istanbul is a gateway between Asia and Europe, the orient and the west, and a crossroad of civilizations that has so much to offer to her visitors including breathtaking natural scenery and unique historical, exotic and archaeological sites. The convention center and hotel, Conrad Istanbul, is located in the Besiktas area of Istanbul, one of the cultural centers of the city. We would like to invite you to participate in the XXII Congress of the European Society



for Stereotactic and Functional Neurosurgery (ESSFN 2016) as it will be a significant contribution to the society.

We look forward to seeing you in Istanbul.

Yours sincerely, Ali Savas, MD, PhD Chairman, Organizing Committee









FUNCTIONAL NEUROSURGERY IN UKRAINE: HISTORY, CURRENT STATE AND FUTURE PROSPECTS

Dear colleagues!

On behalf of the Ukrainian Association of Neurosurgeons, I would like to thank the Honorary President of ESSFN, Professor Joachim K. Krauss and the President of ESSFN, Professor Damianos E. Sakas, for their support to Ukrainian neurosurgeons in getting ESSFN membership. It is a great honor for me to represent Ukraine in the Executive Committee starting at its meeting, which took place during the XXI Congress of ESSFN, in Maastricht in September 17-20, 2014.

Ukraine is one of the biggest countries in Europe with an estimated population of 45 millions. Currently, in Ukraine, there are 134 neurosurgical units, in which 831 neurosurgeons are being employed. We have four centers performing stereotactic neurosurgical interventions: Institute of Neurosurgery (Kyiv), Dnipropetrovsk Regional Psychiatric Hospital, Kharkiv Institute of Neurology and Psychiatry and the Centre of Neurology and Neurosurgery in Uzhgorod.

The Institute of Neurosurgery in Kyiv is the principal neurosurgical centre in Ukraine, the hospital where functional neurosurgery began, and, it is currently the leading center of the country. The first pallidotomy was performed there in 1959. The patient was an 8 years old boy suffering from generalized dystonia. The operation was performed by the Institute's Director, Professor O. Arutiunov. Over the following several years, stereotactic interventions were widely implemented in clinical practice. In 1965, O. Arutiunov with his colleague O. Laponogov reported a series of 96 patients who underwent 124 procedures. The indications were Parkinson's disease, essential tremor, dystonia, chorea, and ballismus. In the 1960s, stereotactic interventions were introduced in epilepsy surgery. Hippocampus, amygdala, Forel's field and various thalamic nuclei were the targets for ablative interventions. There were also attempts to stimulate the cerebellar cortex in patients with drug-resistant epilepsy.

In 1974, the first Eastern European department of functional neurosurgery was founded in the Kyiv Institute of Neurosurgery. It was headed by Professor O. Laponogov until 2011. By 2000, more than 6 000 stereotactic procedures had been performed in this department with the following distribution: Parkinson's disease: 3 500; dystonia: 600; other hyperkinesises: 600; epilepsy surgery; 1 500.

The modern era of stereotactic functional neurosurgery started in the Institute of Neurosurgery in 2006, when a new CRW Radionics frame with software for target calculation was installed. Since that time, over 750 stereotactic biopsies and cyst aspirations have been performed. Furthermore, 15 patients underwent stereotactic aspiration of intracerebral abscesses, and in 6 cases, deep-seated intracerebral haematomas were evacuated using stereotactic techniques. In 2008, we obtained the necessary equipment and tools for intraoperative macrostimulation and radiofrequency lesioning. In April 2008, the first stereotactic radiofrequency lesionings for Parkinson's disease and dystonia were performed in Kyiev with the participation of Prof Tipu Aziz. In a period of two days, 5 patients underwent thalamotomy, pallidotomy and STN lesioning. Since that time, over 650 patients with Parkinson's disease, essential tremor, dystonia and other movement disorders have

been treated using stereotactic lesioning operations.

In May 2012, the first two procedures of DBS for Parkinson's disease and dystonia were performed in Ukraine with the participation of Professor Istvam Balas (Petcs, Hungary). In the next two years, 14 patients received implantation of a DBS system. However, in the years that followed, the lack of state funding has kept the number of DBS interventions low.



During the last 7 years, our approaches to epilepsy surgery have changed markedly. Temporal lobectomy and hippocampectomy remain the main procedures in temporal lobe epilepsy but corticectomies have also been used widely. In 2010, stereotactic anterior callosotomy was introduced in the department, and since then, it has been performed in 15 cases. In June 2013, the first microsurgical callosotomy was performed in our institution with the participation of Profs James Rutka and Mark Bernstein (Toronto, Canada). Since that time, we have operated on seven patients with severe epilepsy and epileptic encephalopathy.

Currently, we face several obstacles, which are hindering further progress in functional neurosurgery in Ukraine. These problems include the lack of state financial support in medicine, which is due to the economical problems and the ongoing war; these developments have worsen significantly the future prospects in this field. Other problems include the restrictions in obtaining or maintaining modern equipment for performing up-to-date functional interventions and the poor cooperation among neurologists and neurosurgeons. Notably, since August 2014, we have been unable to use the Planning Station for target calculation; this led to a reduction in our experience with long-term invasive EEG recording;.

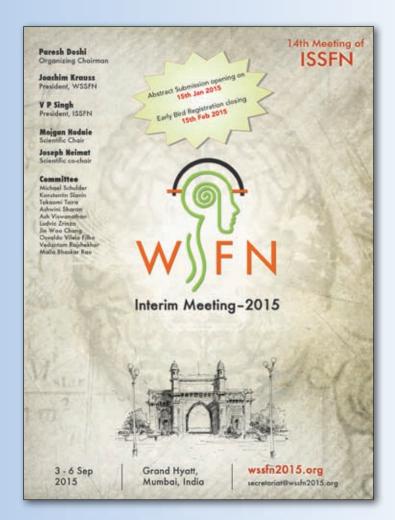
The above described problems lead to the conclusion that the prospects of developing functional neurosurgery in Ukraine are dependent on the increasing contacts with ESSFN and WSSFN (attending meetings, short observerships) and participation in programs designed to assist countries of low-income. It is important to ensure the availability of modern facilities and functional stereotactic equipment in the Institute of Neurosurgery in order this center to continue to be the leading training centre of functional neurosurgery in Ukraine. Finally, it is important to develop the state program of neuromodulation for treatment of Parkinson's disease, dystonia, other extrapyramidal disorders and epilepsy and to increase contacts and cooperation with neurologists and psychiatrists.

I am sincerely looking forward to future collaboration with every member of ESSFN and would like to invite all colleagues to Kyiv.

> Kostiantyn Kostiuk, M.D., Ph.D Head, Department of Functional Neurosurgery Institute of Neurosurgery Kyiv, Ukraine

11





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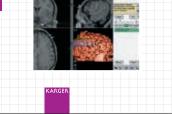
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Official Journal of the World Society for Stereotactic and Functional Neurosurgery Official Journal of the American Society for Stereotactic and Functional Neurosurgery Official Journal of the European Society for Stereotactic and Functional Neurosurgery

Stereotactic and Functional Neurosurgery

Impact Factor: 1.849 (2011)



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