



Jin Woo Chang

### LETTER FROM THE PRESIDENT

Dear Friends and Colleagues,  
First, I would like to express our solidarity through the World Society for Stereotactic and Functional Neurosurgery in these difficult times caused by the COVID-19 pandemic.

Regrettably, the increasing number of patients with the new delta variant has created another challenge for us, and has made our academic activities more difficult.

We are all concerned about the future potential impact of new COVID-19 variants on our 2021 Biennial Congress meeting scheduled in September, 2022.

Currently, we are trying to provide opportunities for education as well as communication among members globally through virtual meetings. The first virtual symposium by the scientific committee of our society was very successful with more than 500 registrants for the symposium on May 1st 2021.

The second virtual symposium will be held on November 6th 2021 and I believe that it will also

be a very informative symposium. I sincerely encourage our members' participation at this event.

We all hope that this devastating pandemic will be behind us as soon as possible, enabling us to resume our regular meetings, in person, all being well for the fall of 2022.

The 19th WSSFN meeting, which is slated for Incheon, South Korea on September 4-7, 2022 will offer a timely opportunity for us to advance stereotactic and functional neurosurgery, both in the clinical and the basic research fields.

We have continued to work intensively on the organization of what is certain to be a successful 19th WSSFN meeting.

I am deeply thankful for your continuous support and hope to see you all soon again.

Please stay healthy and safe!

Sincerely,

Jin Woo Chang  
WSSFN President  
Seoul, Korea

As the president and on behalf of all members of The WSSFN, I would like to honor Dr. Erich Richter for his 10 years of service as editor of the WSSFN newsletter. We are very grateful for the time and expertise he shared in developing the newsletter that provided valuable information to the stereotactic and functional neurosurgery community. He has planned to step down and provide the editor opportunity to Dr. Harith Akram who has generously offered to become the WSSFN editor.

**We would again like to extend a special appreciation for his 10 years contribution to our society.**  
Information regarding Dr. Akram can be found in this newsletter. Wishing the very best to you both!

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Erich Richter

## FROM THE EDITOR

Welcome to the fall 2021 newsletter of our great society. It has been a noteworthy year, and the pandemic has sharply limited our ability to meet in person. However, challenges can stimulate progress, and our leaders have risen to the occasion with new opportunities for virtual connection and learning. Another positive change is that the time has come to turn over the reins of the newsletter to the capable hands of Dr. Akram, who has prepared this edition with insight and style. If you are not already familiar with his many contributions, please be sure to review a short bio on the next page.

In addition to our meetings, webinars, and awards, this issue features a Journal Update, a historical article about world-scale vaccination efforts, and a provocative discussion of barriers to acceptance of DBS for psychiatric indications. There is also an important update on the stereotactic academy regarding the new modules for resident education. Please take a moment to pause and read the memorial for the passing of Professor Sang Sup Chung.

It has truly been an honor and privilege to serve the society with the newsletter and I am happy with these words to hand it off to Dr. Akram. I look forward to seeing you all in person soon!



# WSSFN

# 2022

WORLD SOCIETY FOR  
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FUNCTIONAL NEUROSURGERY

SEPTEMBER 4 - 7, 2022

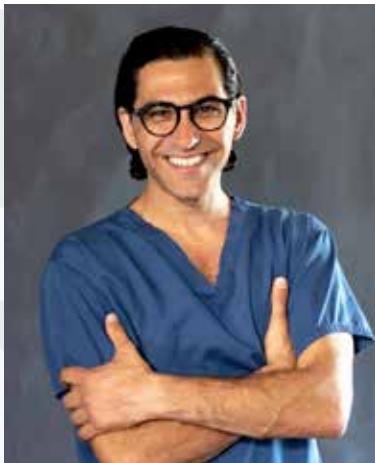
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## MEET HARITH AKRAM



### Harith Akram MBChB PhD FRCS (Neuro.Surg)

Harith Akram is a fellowship trained consultant in functional neurosurgery at the National Hospital for Neurology and Neurosurgery (University College London Hospitals) and the Unit of Functional Neurosurgery (University College London Institute of Neurology) in Queen Square. He holds the Norman Dott Gold Medal for the highest mark in the FRCS exam (Royal College of Surgeons of England). He also holds the Clarke Medal for the Cutlers' Surgical Prize (Royal College of Surgeons of England), one of the most prestigious annual prizes for original innovation in the design or application of surgical instruments.

Dr Akram is a regularly invited keynote speaker and lecturer at various international neurological and neurosurgical conferences. His research interests are in advanced computational neuroimaging and connectomic neurosurgery. His PhD degree on 'The Application of Advanced MRI connectivity in Functional Neurosurgery', awarded by UCL, received the Queen Square Symposium PhD Prize. He has ongoing work to develop translational methods in MRI brain connectivity, in addition to his involvement in various clinical trials to improve the safety and efficacy of existing therapies, and explore new and emerging applications.

patient care

teaching

research

WSSFN Fall 2021

## WSSFN NOVEMBER WEBINAR | NOVEMBER 3, 2021

### DBS and Ethics in a Historical Perspective | By Marwan Hariz

*Webinar November 03, 2021 at 5 p.m. CEST*

Professor Hariz is a well known and well loved speaker and neurosurgeon all over the world. He is one of the renowned neurosurgeons and researchers in the field of stereotactic neurosurgery.

He will talk about ethical issues pertaining to Deep Brain Stimulation as well as interesting Historical aspects of DBS.

We look forward to this session and would like to invite all neurosurgeons and functional neurosurgical teams to join us for this exciting event.

*Moderator:*

### Dr Nico Enslin

Consultant neurosurgeon Red Cross War Memorial Children's Hospital and Constantiaberg University of Cape Town, Cape Town, South Africa

### Professor Marwan Hariz

Emeritus Professor  
Functional Neurosurgical Unit  
Umea University, Sweden

# STEREOTACTIC ACADEMY

## What a neurosurgical resident should know about stereotactic neurosurgery

By Professor Patric Blomstedt\*

It might come as a surprise to the honoured reader, but I have understood that most residents in neurosurgery do not have the ambition to pursue a career in stereotactic functional neurosurgery. However, besides being a "supra-specialty", as coined by our former president Joachim Kraus, stereotactic neurosurgery is often a part of a neurosurgical residency training program. What is less clear is how extensive this part might be. For that reason, we submitted an open survey to the board members of WSSFN and selected colleagues around the world, of whom, 25 kindly responded revealing two major insights:

1. The stereotactic curriculum for a neurosurgical resident varies considerably around the world. At one end, we have countries such as the USA and Spain, where, according to the answers provided, a resident is expected to be able to perform a complete DBS procedure (including interpretation of MER in Spain). At the other end we have countries like Japan, where only a general understanding of the procedure is expected; and Russia, where the majority of residents do not have access to a stereotactic device. Most countries end up somewhere in between. Typically, a resident should have an understanding of stereotactic neurosurgery in general, have participated in some functional procedures, and more or less is able to perform a stereotactic biopsy.
2. According to many responders, there is a significant discrepancy between what is expected, and what is typically achieved towards the end of residency training
3. There was also a third insight that could be gained from this survey: Taking point two into consideration; that responders from the same country sometimes provided very different answers; likely due to a lack of a national training curriculum and discrepancies between local training programs

4. But shame on him who capitulates! Based on this scanty knowledge we decided to create an internet-based course at the Stereotactic Academy covering what we believe a resident should learn. For this, our own lack of knowledge was not sufficient, which is why we consulted a number of residents to better understand what they do not know but would like to learn. The result became a course in four modules with 21 lectures providing a general introduction to the field, including stereotactic biopsies, stereotactic lesioning, and deep brain stimulation. For an introduction to the course, please see this video: <https://youtu.be/9Mgif8JdRtk>

Considering the variations in the curriculum between different countries, it is of course impossible to find a size fits all, but we have tried to accommodate the different needs by recommending the residents to tailor the curriculum after discussion with their supervisors. We suggest how to disregard what is perceived as superfluous, or how to add lectures and courses from the Stereotactic Academy to fill in what is perceived as missing.

The course has just been launched and it is too early to decide how it will be received. Hopefully, it will be of some value, not least considering how COVID has reduced the availability of national and international courses.

Please, suggest to your residents to check it out, and perhaps even have a look yourself. Any suggestions from the esteemed readership on how to improve this course would be highly appreciated, and please feel free to use it in your residents education in any form you find suitable.

\**Patric Blomstedt is professor in stereotactic functional neurosurgery, director of the WSSFN, president of SSSFN and director of the Stereotactic Academy*

[www.stereotactic.org](http://www.stereotactic.org)  
**Stereotactic Academy**

An E-learning resource under the auspices of WSSFN  
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**Stereotactic and Functional Neurosurgery**  
 2010 Congress of the European Society for Stereotactic and Functional Neurosurgery, Paris, September 21-24, 2010  
 Minimally Invasive Therapies and Functional Neurosurgery  
 Stereotactic and Functional Neurosurgery  
 Stereotactic and Functional Neurosurgery  
 The latest from JNSN

**Faculty**



## BALMIS EXPEDITION (1803-1806)

### The [Real Expedicion Filantropica de la Vacuna] or the Balmis Expedition (1803- 1806)

By Dr Cristina Torrez Diaz PhD

Functional neurosurgeon, University Hospital la Princesa & Hospital Ruber Internacional, Madrid

Dr. Cristina Torrez

The path to achieving worldwide immunity against Covid-19 is underway. At the time of writing, nearly 4.5 billion vaccine doses have been administered in over 214 countries and regions, barely 18 months after the first Covid-19 case was reported in China. Several vaccines have been developed at record speed, reflecting decades of research in vaccine development in general as well as the great universal will (and finance) dedicated to fighting the new disease.

Experts have made it clear that worldwide immunity is essential to ending this pandemic. The goal now is to globally distribute and administer the various vaccines that have been developed. This is no doubt a great challenge today, let alone in 1796 when the English physician Edward Jenner introduced his smallpox vaccine, especially as back then, many in the scientific community had not reached a consensus on the usefulness of vaccines.

In Europe alone, smallpox had claimed the lives of over 60 million people in the 18th century, making no distinction between social classes, and becoming a scourge on young and old alike. Indeed, it was the deadliest of pandemics, wreaking havoc in the Americas since the arrival of the conquistadors, who unwittingly carried the virus with them. Smallpox became the leading cause of death amongst the indigenous populations there and paved the way for conquest.

The first smallpox vaccination campaign was carried out in Madrid in 1801. Enter Francisco Javier Balmis Berenguer, the Spanish king's personal physician and a devotee of Jenner's revolutionary method. His zeal convinced the Spanish Crown to send an expedition to bring the vaccine to the Spanish colonies.

Since the journey would take three years, the first problem that presented itself was the preservation of the serum sample, which was no longer effective after a few days. Balmis, therefore, made the ethically dubious decision to transport the serum in the living bodies of 22 orphans from La Coruña, inoculating them with the virus one after the other in the course of a dangerous sea trip. The children, accompanied by their rector and a dozen doctors and nurses embarked for the New World on November 30, 1803 aboard the María Pita. In the event of potentially fatal complications, two children were inoculated every week with the pustules of those vaccinated the week before, thereby preserving the serum until it reached the shores of the Americas.

After inoculating the children of Tenerife's most distinguished families, the expedition anchored in Puerto Rico in February of 1804, and shortly thereafter arrived in present-day Venezuela, where the vaccine was successfully spread throughout the region. The convoy then divided into two groups. The first group, commanded by the surgeon José Salvany, headed south to distribute the vaccine but faced many obstacles and ultimately, disaster. Most of the crew would not survive, and Salvany would become ill and blind in one eye before dying in the

city of Cochabamba in 1810.

Balmis himself led the second group, intending to distribute the vaccine through the Caribbean and Central America. He too encountered resistance from local authorities and parents who were reluctant to submit their healthy children to an experimental treatment. Despite opposition from the viceroy of New Spain, he established several autonomous vaccine boards responsible for the quality and distribution of the vaccines, which involved the recruitment of children for successive inoculation.

Balmis then led successful expeditions into what are now the southwestern United States of America before embarking on another hazardous journey across the ocean bound for the Philippines. Once more, the children and their guardian, Isabel Zendal, played a key role in the preservation of vaccine. Again, the mission was met with opposition from government officials and the Church after arriving in April of 1805. However, nine thousand people were vaccinated by August. The vaccine was then administered to other parts of the archipelago.

Nevertheless, Balmis's work was not yet done. After sending his expedition back to New Spain, he sailed with three of the children from his mission to Macau and Canton, from where the vaccine was distributed through Chinese territories. As he had run out of money, he decided to return to Spain, but had to borrow money for a ticket to Lisbon. Despite the ongoing conflict between Britain and Spain at the time, Balmis offered the vaccine to British authorities on a stopover at the British overseas territory of Saint Helena.



He returned to Madrid on September 7, 1806. Charles IV received him and his palace and bestowed upon him the honours that one might expect after having led the most consequential medical expedition in history.

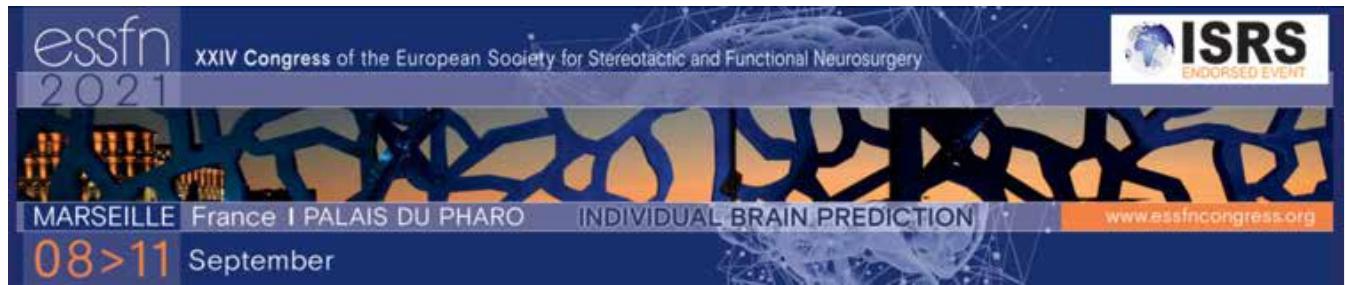
The ship María Pita departing from Coruña in 1803, engraved by Francisco Pérez

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By Harith Akram MBChB PhD FRCS (Neuro.Surg)

Following earlier postponement due to the global Covid pandemic, the European Society for Stereotactic and Functional Neurosurgery had its 24th Congress meeting in Marseille, France under the banner of "Individual Brain Prediction". This was one of the first major European and international meetings to take place, face to face since the start of the pandemic. There was plenty of heartfelt emotions and appreciation for the opportunity to meet again, in that wonderful city and under one roof. Professor Jean Régis (Local Host and ESSFN Secretary), the rest of the ESSFN Board of Officers and the Local Organizing Committee were deeply congratulated for putting together an outstanding scientific – and social program, not to mention the care put into all the necessary health measures. What a joy it was to meet again!



**Delegates at the President's Dinner at La Nautique in Marseille, France**



**Professor Jean Régis**  
Secretary of the ESSFN,  
Local Host



**Andres M. Lozano,  
MD, PhD**  
*Editor-in-Chief,  
Stereotactic and  
Functional Neurosurgery*

## Journal Leadership

It has been one year since I was appointed as the fourth Editor-in-Chief of Stereotactic and Functional Neurosurgery, following Dr. David Roberts' outstanding eighteen-year term at the helm. I am grateful to have the tremendous support of returning members of our Editorial Board. We have built on this stellar core of expertise by adding 14 exceptional new members to the Editorial Board, from Argentina, Australia, Canada, Germany, Italy, Netherlands, Portugal, South Africa, Sweden and the United States (<https://www.karger.com/Journal/EditorialBoard/224132>). I would like to thank each of these individuals for contributing their time and expertise and for their help in shaping the path ahead.

## Historical Publications Analysis

An initial undertaking was to survey the works published and impact of the papers published in the journal since its inception (The Evolution of Our Journal Stereotactic and Functional Neurosurgery: From 1938 until Now and Beyond. *Stereotact Funct Neurosurg.* 2020 Jul 29:1-8). This analysis provided a look into the technological and scientific developments that have been and are currently driving our field. We identified 10 seminal publications that received the most citations, as well as the top 10 contributing authors, countries of origin and institutions of origin of publications. Knowing where we have been informs where we are headed.

## New Initiatives

We strive to drive the impact and relevance of our journal in the functional neurosurgery community and beyond. We have initiated a number of new initiatives with this in mind.

## New Associate Editors

The timeliness of manuscript turnaround is important. With this in mind, we have set the goal of decreasing the interval between paper submission and first decision. This will be accomplished by committing to getting a first decision within 30 days of paper submission and implementing rapid editorial screening and returning papers within 10 days if they are deemed unlikely to be published. To assist in these objectives, I am pleased to welcome Drs. Francisco Ponce (Phoenix) and Nir Lipsman (Toronto) as Associate Editors.

## New Invited Reviews Section: Reviews in Functional Neurosurgery

Review papers play a role of appraising and consolidating topics of interest in our field. We have initiated a new section of our journal for both invited and author-initiated reviews. These "Reviews in Functional Neurosurgery" will cover experimental work, new techniques and clinical studies. The commissioning and peer-review process will be overseen by our five

new Associate Editors of Reviews, Drs. Eric Fonoff (Sao Paulo), Jorge Gonzales-Martinez (Pittsburgh), Clement Hamani (Toronto), Yasin Temel (Maastricht) and Hiroki Toda (Tokyo). We anticipate the first Reviews article will be published by the end of 2021.

## New Case Report Format: Images in Stereotactic and Functional Neurosurgery

While we will continue to publish exceptional case reports, we will shift to a new shorter and visually captivating format. This new case report format called "Images in Stereotactic and Functional Neurosurgery" will have 1 figure and up to 600 words and five references. This format allows for express communication of particularly novel image-based findings, and we have received a number of submissions via this publication route.

## Editor of Social Media and Outreach

We recognize the importance of the relevance and impact of our work both within and outside the functional neurosurgery community. With this in mind, we are thrilled that Dr. Michael Staudt (Rochester, USA) accepted our invitation to serve as Editor of Social Media and Outreach. The initiative seeks to raise the profile of our journal and to promote research articles via Twitter, Facebook, altimetrics, and other communication efforts, in collaboration with already established social media presences at Karger. Additional outreach efforts to the functional neurosurgery fellows community are currently underway.

## Giants in Stereotactic and Functional Neurosurgery

This exciting new project seeks to identify the "Giants" in our discipline. "Giants" are defined as "A neurosurgeon or scientist who has pioneered or contributed a major innovation, discovery, or method that has benefited and influenced the field of functional neurosurgery". A "Giant" could have also played a significant educational role to develop the field of stereotactic and functional neurosurgery.

We are in process of soliciting "Giants" nominees from each the 9 neurosurgical societies represented by our journal (WSSFN, ASSFN, ESSFN, ISSFN, JSSFN, MSSFN, SLANFE, KSSFN and RAFN). The final selection of "Giants" will involve a voting mechanism by our journal's Editorial Board.

I am grateful for the invaluable support of the following individuals, who have agreed to oversee the "Giants" project. Drs. Sameer Sheth (North and South America), Marwan Hariz (Europe), Patric Blomstedt (Europe), Takaomi Taira (Japan / Asia) and Hiroki Toda (Japan / Asia).

Finally, I would like to extend special thanks to highly talented and dedicated Karger office in Basel, in particular Dr. Teresa Mathews (Publication Manager), Ms. Shelly Shochat (Editorial Office) and Ms. Angela Weber (Production Editor). Their assistance during the transition and over the past year has been invaluable, and I look forward to continued collaboration between our Toronto and Basel offices on new initiatives for the journal in the years to come. I am particularly interested in hearing from all of you and your ideas how to make our journal even better.

## JIN WOO CHANG AWARDED THE WILLIAM AND FRANCIS FRY HONORARY FELLOWSHIP

patient care

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research

WSSFN Fall 2021

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Congratulations to Dr Jin Woo Chang, President of the WSSFN, for being awarded the William and Francis Fry Honorary Fellowship for Contributions to Therapeutic Ultrasound by the International Society for Therapeutic Ultrasound (ISTU). This lifetime achievement award is given annually to an individual who has made outstanding contributions to therapeutic ultrasound. Dr Chang received the award at the 20th Annual International Symposium for Therapeutic Ultrasound (ISTU 2021) held in Gyeongju, South Korea in June 2021 for his prominent work in the field of MR guided focused ultrasound (MRgFUS).



is a non-profit organization founded in 2001 to increase and diffuse knowledge of therapeutic ultrasound to the scientific and medical community, and to facilitate the translation of therapeutic ultrasound techniques into the clinical area for the benefit of patients worldwide.

## WSSFN INTERIM VIRTUAL SYMPOSIUM REPORT

The impact of the COVID-19 pandemic has led to a number of educational events being disrupted across all disciplines of neurosurgery. This includes the WSSFN biannual congress at Seoul, Korea, which has now been postponed to 2022. As functional neurosurgery is arguably one of the most academic subspecialties, the WSSFN organized the first virtual symposium of the year on 1st May, 2021, in order to deliver the latest research to our members. The event, moderated by Dr Kendall Lee, Dr Mojgan Hodaie and Dr Paresh Doshi, has been a huge success with 563 registrants signed up to learn about the cutting-edge advances in the field from our international experts. The range of topics includes the latest visual cortical prostheses, optical genetics, gene therapy for Parkinson's disease, neuromodulatory techniques to manipulate the arousal system and neurotechnologies for restoring motor control after paralyzing neurological injuries. The feedback from our listeners has been overwhelmingly positive.

We would like to sincerely thank Dr Nader Pouratian, Dr Christian Lüscher, Dr Michael Kaplitt, Dr Alexander Green and Dr Jocelyn Bloch for their highly engaging lectures, as well as our sponsors (Medtronic, Insightec, Boston Scientific and Navinetics), who have kindly pledged support for all three WSSFN Virtual Symposia. Please remember to keep an eye out for our upcoming webinar on 6th November, 2021 (9am to 11am; GTM +9) with another excellent line-up of speakers, including Dr Lorach, Dr Hoadie, Dr Erickson, Dr Horisawa and Dr Vanderwale, and our industrial presentations. We look forward to seeing all of you.

Drs Jason Yuen, Hojin Shin, Yoonbae Oh, Kendall Lee

## DBS in psychiatry: 'grossesse nerveuse' or delivery by forceps?

By Prof. Marwan Hariz MD PhD

*Functional neurosurgeon, and ex-gynecologist-obstetrician*

Umea, Sweden

Modern DBS in psychiatry was introduced in 1999 for OCD, and in 2005 for depression. Today, in 2021, despite frenetic activity and promotion for over 20 years – almost solely by functional neurosurgeons – none of these procedures has made a dent or became established or got officially endorsed by legal bodies, or even by psychiatrists' or patients' associations. So, is DBS in psychiatry a kind of 'grossesse nerveuse', or is there a real baby in there somewhere, stuck and in need of delivery, be it by forceps, vacuum aspiration, or even a caesarian section?

The symptoms of 'grossesse nerveuse' in gynecology consist of amenorrhea, nausea, vomiting, breast pain, abdominal distension, weight gain, etc. The symptoms of 'grossesse nerveuse' in psychiatric DBS consist of enthusiastic optimism, an inflated number of suitable patients, a potential of securing a patent for the procedure, media promotion, numerous publications (many without patients), hubris, blind hope behind a procedure that is chronically 'promising', chronically 'emerging', chronically 'investigational', etcetera, etcetera, etcetera.

So, like grossesse nerveuse, is psychiatric DBS a wish, a desire, a hope of growing into something that is recognized, accepted and mainstream? but is there "substance" to this wish? Or is there may be a need? (i.e., by patients?), or is this just in the imagination of enthusiastic neurosurgeons and some neurologists and a microscopic minority of misguided psychiatrists?

Alas, after about 20 years of "gestation" (or a "chronic" state of pregnancy) it seems as though psychiatric DBS is either not needed, has no "substance", no patients, is ineffectual, a myth, an illusion, a form of wishful thinking (i.e., a grossesse nerveuse); or it is indeed needed, has substance, and patients with unmet therapeutic needs, is safe and helpful. If the latter is true, then it must be 'delivered' using all available means. And if such is the case, those who are best placed to take the initiative in implementing this assisted delivery are neither the gynecologists nor the neurosurgeons, no matter how skilled they are. Those best apt to deliver psychiatric DBS (and psychiatric stereotactic surgery in general) are the community of psychiatrists, once they are convinced, not by neurosurgeons, but by the very few psychiatrists among them who understand surgery and appreciate that this option is viable for their otherwise refractory patients.

### Reasons for success of DBS in movement disorders

Following the introduction of modern DBS, first in the Vim in 1987 and then in the STN and Gpi in 1993 and 1994 respectively, it did not take long before these procedures gained worldwide acceptance, virtually replacing the previous thalamotomies and pallidotomies in the surgical treatment of advanced Parkinson's disease and dystonia. This is because DBS for movement disorders was embraced

early and fully by movement disorders neurologists who took the lead in promoting, studying, and evaluating this new surgical method. In fact, the first major papers on STN DBS were first authored by neurologists (Pollak 1993, Limousin 1995 in Lancet and 1998 in NEJM) and the first multicenter RCTs of STN DBS were designed and conducted by neurologists (Deuschl, Agid, Schupbach). The International Movement Disorders Society (MDS) had also officially endorsed DBS in the STN and Gpi, and to date hundreds of neurologists, neurophysiologists, and others, worldwide have documented and published innumerable papers about DBS in movement disorders, and neurologists continue to refer patients and lead the field clinically and academically.

### Status of DBS in psychiatry

DBS for OCD and depression, two conditions that, according to the WHO, carry a much bigger global societal burden than Parkinson's disease, is still not considered an established therapy and is either prohibited or not reimbursed in most countries, unless it is performed within trials, which by the way, do not elicit sufficient interest from industry sponsors anymore, and do not appeal to the learned societies of psychiatrists to promote either. The very few trials conducted and published had either flawed designs, very small patient numbers, or have failed to have a real impact. The reason behind all of this lies in the apathy and indifference, if not aversion, of the majority of psychiatrists towards surgery. Only a minuscule number of psychiatrists have been seriously involved in DBS and have been publishing in this field in the last 20 years. These amount to 1-2 psychiatrist per country (and only in very few countries). Some of these psychiatrists are even considered pariah by their peers. It is evident that as long as those few psychiatrists do not succeed in convincing a sizeable number of colleagues about surgery including DBS, this field will stagnate. This is because neurosurgeons alone will never be credible in doing so. The DBS industry has its own simple agenda, which is to make profit for its shareholders, which means that if there is no market for an indication for DBS, there is no incentive to sponsor a trial. This is exactly what happened in DBS for depression after the two failed trials in the US. And yet, in the aftermath of these two trials, there was a "position statement" published in *Stereotact Funct Neurosurg* 2015;93:69, by "The Psychiatric Neurosurgery Committee and Board of Directors of the ASSFN" that was, I am sorry to say, blatantly beside the point. The authors wrote that they "would like to express their enthusiastic and unwavering commitment to research exploring the neuromodulatory treatment of psychiatric disease" as if anybody had any shadow of doubt about neurosurgeons' commitments to this issue. The authors continue by stating "We wish to reassure (Continued on page 10)

## MODERN DBS IN PSYCHIATRY (CONT.)

the many sufferers of psychiatric disease that we are committed to untangling these complex disorders and remain steadfast in our conviction that neuromodulation will ultimately be an important therapeutic modality." as if the "many sufferers" would doubt for one second the eagerness of functional neurosurgeons for DBS or that they would fail these patients. The grand finale though, in that article, is when the authors state that "the ASSFN Board of Directors has begun a dialogue with the leadership of the neuromodulation industry", really? not a dialogue with the psychiatric community?! not a dialogue with patients' associations? moreover; "ultimately, progress will require a partnership between academia and industry to produce viable solutions for the treatment of psychiatric disease" Note, not a partnership between neurosurgical academia and psychiatrists?! they then continue - "we are fortunate to have thoughtful and committed partners in these future endeavors. Through such collaborations, we are eager to continue working to design successful treatments". And who are these partners? the industry? will the industry "design successful treatments"?

Not a single word in that religious "position statement" was about the need to work with, and convince, psychiatrists of the viability, safety and need for DBS in refractory OCD and depression. And by the way, did any association or committee of psychiatrists comment on these trial failures? Did any committee of psychiatrists approach industry to facilitate more trials of DBS for depression or DBS for OCD?

Not mentioning that "ultimately, progress will require a partnership" between psychiatrists and neurosurgeons beggars belief. Is it industry who designs trials and evaluates results? And today, 6 years after that fateful statement of the ASSFN Board and its psychiatric committee, neither psychiatrists nor industry are interested in psychiatric DBS. Therefore, it remains "investigational", "experimental", "promising", "emerging" we "hope", we "believe" (Amen). after 20 years of gestation.

Let us be humble and realize that we, as functional neurosurgeons cannot on our own deliver functional neurosurgery (that is, neurosurgery for NEUROLOGICAL and PSYCHIATRIC illnesses), we cannot on our own make surgery for these conditions mainstream! If Benabid and neurosurgeons alone had lobbied for STN DBS, it would have never fled. It is mainly the hundreds of neurologists, neurophysiologist, and others worldwide who endorsed, promoted, published, developed and adopted DBS. They were the ones who referred patients, and designed trials, and assisted in the operating room, and took care of the patients afterwards. They even described all kinds of psychiatric side effects, personality changes etc. after DBS for PD and dystonia,

and this has not at all deterred them from advocating DBS for their patients!

On the other hand, and despite 20 years of frenetic activity (mainly by neurosurgeons), most psychiatrists are still skeptical, aversive, indifferent, and sometimes ignorant when it comes to DBS. They seldom, or never go to surgery, or evaluate, advise, or take the lead. It remains very difficult to recruit patients for trials. None of the regular congresses of psychiatric learning societies dedicate discussion or learning time for surgery (as is commonly the case in MDS meetings). Until our very



few guerrilla-psychiatrist colleagues who have been supporting surgery in the last 2 decades take the initiative to promote surgery among their psychiatrist peers in a systematic and aggressive manner, delivering it so it becomes mainstream, psychiatric surgery, including DBS will remain "emerging" "investigational" etc., that is... in a status of chronic gestation.



### 2022

#### **Asian Australasian Society for Sterotactic and Functional Neurosurgery (AASSFN)**

13th Meeting 2023  
Osaka, Japan

#### **North American Neuromodulation Society (NANS)**

January 13-15, 2022  
Orlando, FL

#### **International Stereotactic Radiosurgery Society (ISRS)**

April 3-7, 2022  
Brisbane, Australia

#### **American Association of Neurological Surgeons (AANS)**

May 2, 2022  
Philadelphia, PA

#### **International Neuromodulation Society (INS)**

May 21-26, 2022  
Barcelona, Spain

#### **American Association for Neurological Surgeons (ASSFN)**

June 4-7, 2022  
Atlanta, GA

#### **Congress of Neurological Surgeons (CNS)**

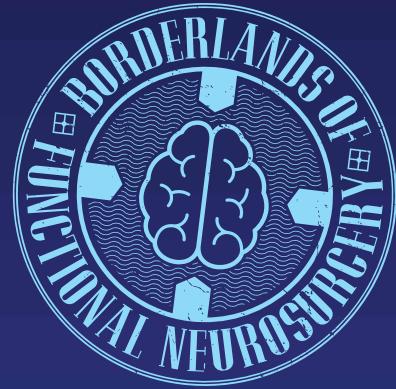
October 8-12, 2022  
San Francisco, CA

# SAVE THE DATE!

AMERICAN SOCIETY FOR STEREOTACTIC AND FUNCTIONAL NEUROSURGERY

# 2022

## BIENNIAL MEETING



**JUNE 4-7, 2022**

LOEWS ATLANTA HOTEL • ATLANTA, GEORGIA

Learn more at [assfn.org](http://assfn.org)



**Robert E. Gross**  
Meeting Chairman



**Ellen L. Air**  
Scientific Program  
Chairman

Jointly provided by the Congress of Neurological Surgeons and the American Society for Stereotactic and Functional Neurosurgery



**CNS**



American Society for Stereotactic  
and Functional Neurosurgery



### WEBINAR #10

# Deep brain lesioning for OCD and Depression: Workup, techniques and outcomes

171 active links from 42 countries • Length of Seminar: 2 hours and 24 minutes



**Keith Matthews MD PhD**  
*Professor of Psychiatry*

Division of Molecular and Clinical Medicine, School of Medicine University of Dundee, Scotland.



**Ludvic Zrinzo PhD FRCS**  
*Professor of Neurosurgery*

Head of the Unit of Functional Neurosurgery, UCL Queen Square Institute of Neurology and the National Hospital for Neurology and Neurosurgery, London, UK

Prof Matthews and Prof Zrinzo are internationally renowned experts in their fields. They gave stimulating lectures on stereotactic ablative interventions for medically refractory OCD and depression. The lectures focused on patient selection, patient workup, target

selection, surgical techniques and outcomes. Prof Matthews provided a psychiatrist's perspective and discussed the referral process, ethical concerns, and the obstacles to more active engagement from general psychiatrists.

## Webinars session - evolution



## PROFESSOR SANG SUP CHUNG OBITUARY



### Professor Sang Sup Chung

January 8, 1938 - August 14, 2021

**Sang Sup Chung** – a pioneer of Korean stereotactic and functional neurosurgery passed away on August 14, 2021. He was noted for his great devotion to functional neurosurgery. He was a generous and a modest person and was a mentor for many over the years. He was born in Seoul on January 8, 1938. He attended Yonsei University College of Science and Technology in 1961 and later graduated from Yonsei College of medicine in 1965. After completing his Neurosurgery residency training, he started working as an instructor of neurosurgery in Kyungpook National University Hospital from 1970 to 1972 after which he returned to Yonsei University to start his career as a full-time functional neurosurgeon. Soon after receiving his PhD in 1974, he moved to the UK (1975 – 1978) to train under John Gillingham and Edward Hitchcock in Edinburgh. Back in Korea, he held various esteemed positions at the Yonsei University College of Medicine including Chairman of the Faculty Council (1996 – 2000), and Director of the Brain Research Institute (1988 – 2000).

Professor Chung was noted for his vigorous academic activities. He represented many academic societies. He was a Founding President of the Korean Society for Stereotactic and Functional Neurosurgery (1990-1992), a President of the Korean Neurosurgery Society (1992-1994), a Founding President of the Korean Epilepsy Society (1996-1998), a President of the Asian Society for Stereotactic and Functional Neurosurgery (1996), a member of the Radiation Surgery Division of the World Neurosurgery Society, a member of the Stereotactic and Functional Neurosurgery Division, a President of the World Association of Neurosurgery (1992-2002), a President of the Korean Association for Pain Research (1992-2002), a Director of the World Stereotactic and Functional Neurosurgery Society (2001-2002), and a Founding President of the Korean Gamma Knife Radiation Surgery Society (2002-2003). He received the Spiegel-Wycis Award for his contributions at the 16th WSSFN meeting in Tokyo, Japan.

Professor Chung gave birth to Korean stereotactic and functional neurosurgery. He was a good educator of many grateful students, our Society's president included. He is survived by his beloved family of wife and four daughters. The funeral was held on 14 August 2021 in Yonsei University funeral home.

patient care

teaching

research

WSSFN Fall 2021



## SECOND VIRTUAL SYMPOSIUM November 6, 2021

The pandemic has effected all parts of our lives including the way we update and connect educationally with those in the field of stereotactic and functional neurosurgery.

Following the change of date of the WSSFN Congress from 2021 to September 2022, the Scientific Committee and Officers wanted to provide special virtual symposia to be held twice a year starting in May 2021. The May 2021 symposium was very successful and plans are in place for the next one to be held November 6, 2021. Because of the various time zones it was decided that this virtual symposium would be held on Saturday, 9-11 a.m. Korea and Japan time to make it more accessible for Asia. A third virtual symposium is scheduled for April 2022, in Central European Time.

The symposia will be two hours in length and provide cutting edge and controversial topics presented by leaders in the field. There will be varying formats with ample opportunity for connectivity by the audience.

Topics include:

BMI; DTI; AI; Lesioning; Psychiatric Surgery along with Industrial Presentations on current subjects.

Watch for more complete program information coming your way.

**Also, WSSFN has contributed to educational outreach through periodic webinars. As a member you can connect to any one of the webinars listed on the WSSFN website at [www.wssfn.org](http://www.wssfn.org).**

### Lesioning procedures for management of cancer and non-cancer related pain

*By Pr Konstantin Slavin | Moderator: Dr. Rushna Ali*

### Psychiatric Neurosurgery - Past & Present

*By Pr Patric Blomstedt | Moderator: Dr Nico Enslin*

### Neuromodulation for tremor and related conditions

*By Pr Patric Blomstedt and Pr Ludvic Zrinzo | Moderator: Dr Nico Enslin*

### Surgical management of drug-resistant epilepsy:

#### Resection versus Neuromodulation

*By Dario Englot & Dileep Nair | Moderator: Dr. Rushna Ali*

### Transcranial Magnetic Stimulation: Applications in Neuromodulation, Perioperative monitoring and Neurorestoration

*By John Rothwell & Dirk De Ridder*

*& Vergani & Taylor & Ooberman | Moderator: Dr Nico Enslin*

### DBS using directional leads

*By Dr. Jens Volkmann and Dr. Till Dembek | Moderator: Dr. Rushna Ali*

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