

WORLD SOCIETY FOR STEREOTACTIC AND FUNCTIONAL NEUROSURGERY



My dear friends and colleagues,

This is my last Presidential message – even though it feels that my presidential term started just yesterday, the twoyear tenure is coming to an end, and by the time the next Newsletter comes out this fall, our Society will be led by my successor. At that time, I will join the long line of WSSFN Past Presidents, all of whom, without exception, would remain my role models and mentors.

Many things happened during my term in the office, and I will try covering it in my final Presidential address — but the message today is not about the Society's status and accomplishments, it is specifically about the upcoming XX World Congress of Stereotactic and Functional Neurosurgery that will be taking place in Chicago in the beginning of September.

During the last 12 months, we were fortunate to witness quite a few remarkable professional gatherings: starting from ESSFN Congress in Stockholm, Interim WSSFN Meeting Dubai, World Neuromodulation in Congress in Vancouver and the most recent ASSFN Congress in Nashville, but the main highlight of the stereotactic and functional neurosurgical world will be - without doubt - our congress in Chicago! I am sure most of you have already registered for the meeting enjoying the benefits of discounted "early bird" registration, and reserved your accommodations in the remarkable Chicago Swissotel, the official venue of the congress, located in the heart of Chicago downtown, right on the south bank of Chicago river, between the famous Michigan Avenue and the great Lake Michigan (according to the Wikipedia, the world largest lake (by area) that is located entirely in one country!)

Location of the congress is just one of its many highlights; the other remarkable highlight will be participation of our Honored Guest, the United States Surgeon General Vice-Admiral Dr. Vivek Murthy, a remarkable individual who has previously served in this position during Obama administration and was reappointed in 2021. We do expect an interactive discussion with Dr. Murthy that would be of interest to the worldwide audience as the issues of public health go beyond geographic borders.

The next great reason to attend the Chicago congress is the opportunity to meet many living legends of stereotactic and functional neurosurgery: the past and present WSSFN award winners! This year, the stellar list of awardees includes Bart Nuttin of Belgium, Joachim Krauss of Germany, Jin Woo Chang of South Korea, Kim Burchiel and Michael Schulder of the United States – and I cannot think of anyone else more deserving than these six amazing individuals who will be receiving 2 Spiegel-Wycis awards (the highest WSSFN honor, named after the

(Continued on page 2)

Letter from the President (continued)

founders of our society who started the era or modern stereotactic surgery 75 years ago), Ronald Tasker, Edward Kandel and Phil Gildenberg awards, respectively. A unique chance to meet all these giants of our neurosurgical specialty in person cannot be missed, especially if you are still in training or in the beginning of your professional career!

And then there is the social program of the congress that in addition to the opening reception on September 3 will include the Networking Event on September 5; as we gather in "Offshore Rooftop" at the very end of the famous Chicago Navy Pier, we will be able to enjoy the view of Chicago skyline both in daylight and during the sunset! But the real treat – and the main reason to participate in the XX World Congress of Stereotactic and Functional Neurosurgery - will be its scientific agenda! This year, in addition to the amazing lineup of original research covering all facets of stereotactic and functional neurosurgery. we will have a series of pre-conference educational workshops taught by the most distinguished faculty, and a collection of in-depth breakfast symposia focusing on highly relevant topics of modern functional neurosurgical practice. All and all, the scientific program of the congress, expertly put together by tireless work of the Scientific Program Committee led by Dr. Sameer Sheth, will exceed everyone's expectations.

So, if you have already registered for the conference and booked your hotel accommodation — see you soon in Chicago! If you have not done this yet it is not too late: please do it as soon as possible before we run out of our large (but not unlimited) block of discounted hotel rooms! There is no better time of the year to visit Windy City than early September, and I count on participation of each and every one of you to make this congress the crown event and culmination of my presidential term.

Wishing you all the best $- \mbox{ and thanking you in advance,}$

New Lectures at Stereotactic.org

Konstantin V. Slavin, MD WSSFN President

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LETTER FROM THE EDITOR-



Dear Friends and Members of the WSSFN,

I would like to thank you for your continued support of our society's newsletter. Your contributions help us stay updated with upcoming meetings, educate us with new lectures, and stimulate us with new articles and reviews. This is last edition

before our upcoming and bound-to-bespectacular XX World Congress of Stereotactic and Functional Neurosurgery. The President of the WSSFN, Professor Slavin, has been working tirelessly to ensure it is a meeting to behold, in his own Chicago!

The scientific committee has put together an excellent program encompassing various aspects of our specialty, with not so infrequent trespasses

into other fields of technological advances, aiming to keep our specialty at the cutting edge, in line with our long-established ethos.

In this issue, Professor Marwan Hariz presents a review of the published literature in 2023 in his recurring segment "Hot Topics in Stereotactic and Functional Neurosurgery," and Dr Vanessa Milanese writes an article on the importance of anatomical dissection in functional neurosurgery. We have a report from the ESSFN 2023 meeting in Stockholm, showing an impressive attendance of 708 participants from 54 countries! We also have a report from the 44th Annual Congress of the Egyptian Society for Neurological Surgeons (ESNS) Stereotactic and Functional Neurosurgery section. Last but not least, we have a moving obituary for Professor Vladimir Alexeevich Shabalov, a distinguished Russian academic functional neurosurgeon who passed away in January this year at the age of 71.

I hope to see you all in Chicago.

XX World Congress of Stereotactic & Functional Neurosurgery

3-6 September 2024 | Chicago, USA

JOIN US AT WSSFN 2024!

Celebrating the 75th Anniversary of Modern Stereotaxis

DISTINGUISHED FACULTY AND EXCELLENT TOPICS!

Visit the meeting website at http://www.wssfn2024.org

Register Here



Why Attend WSSFN 2024?

Since 1961, the WSSFN has been regularly holding its World Congresses that continue to be the leading neurosurgery gatherings of our specialty. Currently, these meetings are biennial, allowing the top leaders in the field present the most recent innovations in clinical and basic research, and offering new and effective ways to advance the stereotactic and functional neurosurgery worldwide.

Why WSSFN



Bart Nuttin



Stereotactic Academy

Enroll Now



DBS for psychiatric disorders - an introduction for psychiatrists

1. What is DBS and how is it done?

DBS FOR PSYCHIATRISTS

Patric Blomsted

Marwan Hariz

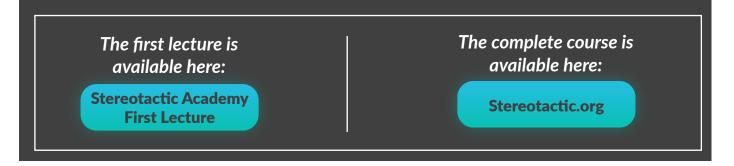
Brain Deep (DBS) established is an effective and often promising and been have conditions, depressive disorders. Unfortunately, while DBS for movement disorders has become a success

Stimulation story, it is rarely used for psychiatric conditions. The most important treatment for severe OCD, reason is probably that results psychiatrists have not presented embraced this treatment. regarding other psychiatric and many of them have including limited knowledge about its potential.

> For that the reason, Stereotactic Academy,

in collaboration with the WSSFN, has created a free course on psychiatric neurosurgery consisting of five lectures dedicated to psychiatrists.

Please share this information if you find the topic to be important.



NEW LECTURES

TO GET ACCESS, Register and login And go the "lectures" section.

- Epilepsy, DBS and controversies
- Multiple Targets in DBS
- iMRI DBS with ClearPoint
- DBS in Cerebral Palsy
- How to Moderate a Scientific session
- DBS for psychiatrists 1. What is DBS and how is it done?
- DBS for psychiatrists 2. The prehistory of psychosurgery
- DBS for psychiatrists 3. The early history of psychiatric neurosurgery
- DBS for psychiatrists 4. Modern DBS for psychiatric conditions
- DBS for psychiatrists 5. DBS for OCD

WORLD NEWS

NEWSLETTERS There is a lot happening in the world of stereotactic and functional neurosurgery, so don't forget to read the newsletters of **WSSFN, ESSFN, JSSFN** & **ASSFN**

MEETING COLLEAGUES

Some opportunities to catch up on the latest developments in the field. (Your upcoming course/meeting could be here!)

- WSSFN Congress, Chicago, September 3-6, 2024
- ESSFN hands on course Psychiatry & Basic Science, Amsterdam, September 29 - October 2, 2024
- DBS & Pain Interventions Cadaver Course, Istanbul, Turkiye May, 2025
- ESSFN Congress, Budapest, September 24 27, 2025.



SELECTED LECTURES ARE AVAILABLE IN:

• SPANISH • JAPANESE • CHINESE

JUST CLICK THE RESPECTIVE FLAG ON THE TOP OF THE WEBPAGE!

essfn XXVI Congress

of the European Society for Stereotactic and Functional Neurosurgery

24-27 SEPTEMBER 2025 Budapest, Hungary

Click Here To Visit The Website



Hot Topics in Stereotactic and Functional Neurosurgery (Review of publications in 2023)

Introduction - by Professor Marwan Hariz

Mea culpa! For some reason, there has not been a Hot Topic during the whole of 2023, so this one here will summarize and comment on some pertinent papers published during 2023. What is considered as "pertinent" is highly subjective and left to my discretion, so I apologize in advance to any reader if his or her paper is not included in this review.

First, I must acknowledge an ERRATUM in the previous issue of Hot Topics, brought to our attention by a diligent reader: Andres Lozano. I wrote then that Dr Gabor Szikla was a neuroradiologist working with Jean Talairach. Wrong! Gabor Szikla was a neurosurgeon. Apologies for my lapsus.

In this episode of Hot Topics one can find summary and comments on a total of 59 papers on the following subjects: Movement Disorders and DBS, Focused Ultrasound (FUS) lesioning, other lesionings, Psychiatry, imaging, general topics related to functional neurosurgery, and "varia", that is, various topics of value for general knowledge (such as Urology in pharaonic times, the history of romantic kissing, how to perform a whole brain transplant, etc.).

It is of note that the rate of publications, especially on DBS in general is still very high, but unfortunately little was published in 2023 on psychiatric surgery. Also, there was a rise in publications on FUS lesion and other lesioning procedures, so we see again a pendulum here with a return of lesions, driven by new technology and its sometimes all too frenetic promotion. Finally, since the topics are often intermingled, papers on movement disorders may be listed under the "Imaging" chapter or vice versa, or under the "FUS" or "Other Lesionings" chapter, depending on the primary focus of the paper... Fortunately, many of the listed papers are "FREE ACCESS" so they can be downloaded and read in full if desirable.

As usual, I insist that whatever opinion or praise or critic in my comments on the papers, these comments are my sole responsibility and do not involve any opinion or endorsement by the Editors of the Stereotactic Academy. As always, any feedback is welcome including critics, praise, protests, etc, either on this platform or by email to me on marwan.hariz@umu.se or on m.hariz@ucl.ac.uk

To accompany this issue of Hot Topics, I borrow a quote by the French Philosopher Julien Benda, from his book "The Treason of the Intellectuals":

"In general, there are two competing sets of value in the world: fame and fortune on one side, truth and justice on the other side. The more vigorous you are committed to truth and justice, the less you are going to see of fame and fortune."

Marwan Hariz, Saturday 27 January, 2024

Here below you will find a selection of recent publications. Use the link to the Stereotactic Academy to access a summary presented by Professor Marwan Hariz.





Lost Art of Neuroanatomical Dissections and Rhoton



Figure 1. The International Rhoton Society members during the 3rd International Rhoton Society Meeting in Istanbul, Turkey, August 22-24, 2023.

The history of neuroanatomical studies, particularly focusing on dissections, reveals a fascinating journey through centuries of scientific inquiry and discovery. The first known written record of a study of the anatomy of the human brain is an ancient Egyptian document, the Edwin Smith Papyrus (~1700 BC). In Ancient Greece, interest in the brain began with the work of Alcmaeon (~500 BC), who dissected the eye and related vision to the brain. Since ancient times, connections have been of tremendous relevance as we see today, nuclei-related, for instance.

More recently, an important name guaranteed we did not leave the benches. Dr. Albert Loren Rhoton Ir. worked for more than 40 years developing the neuroanatomical field and had, at least, ten worldwide recognized neurosurgeons who developed dissections related to functional neurosurgery as his fellows. He is very well remembered among The International Rhoton Society members (figure 1). He always encouraged his fellows to go back to basics, analyze structures (figure 2), and share findings (figure 3). No wonder he published one of the best neurosurgical textbooks, Cranial Anatomy and Surgical Approaches, a guide for neurosurgeons across the globe.

functional neurosurgeons, As we should master the knowledge of neuroanatomy to better understand the benefits and adverse effects our patients may experience from each stereotactic procedure. Tactile work, spatial awareness, anatomical variations, clinical correlations, teamwork and communication are few good reasons to entice the functional neurosurgeon back in the lab, bridging the fundamental connection between theory and real-world application.

Neuroimage, histological work, neuroanatomical tracing methods and dissections – are complementary and lead to a scenario of reciprocal inspiration. I would encourage all who have access to visit anatomy labs and perform dissections, as they offer invaluable hands-on experience and unparallel insights. There is still so much information to be discovered under the microscope.

Eight years after his passing, Dr. Rhoton's words still linger in my mind: "You are Michelangelos in Neuroanatomy", and now, I must add, this art should not be lost.



"You are Michelangelos in Neuroanatomy"

- Dr. Rhoton



Figure 2. Dr. Rhoton visited daily the microsurgical anatomy laboratory stimulating the fellows to present and discuss their work with him. He instigated more findings using his mantra: "Keep working". Gainesville, Florida, USA, December 2, 2015.



Figure 3. Inferior view white matter fiber dissection showing the art of neuroanatomical findings.

The 44th-Annual Congress of the ESNS



The 44th Annual Congress of the Egyptian Society for Neurological Surgeons (ESNS) was held May 21st to May 24th, 2024, in Conrad Hotel, Cairo.

The theme of the meeting was "AMPLIFAI NEUROSURGERY", exploring the fast growing field of AI and its applications in almost all neurosurgical subspecialties.

The ESNS - SFN section organized three precongress workshops in Pain, Spasticity and Stereotactic Neurosurgery; and two scientific sessions during the congress: SFN session and Epilepsy session.

We, organizers of the ESNS-SFN section, received great support from Prof. Konstantin Slavin, President of the WSSFN and the board by accrediting our workshops and scientific sessions. All members of the WSSFN /MSSFN received a 30% discounted registration to workshops and Congress sessions (https://esnscon.com/workshops/)

A total number of 74 attendees from various subspecialities such as neurology, pediatric neurology

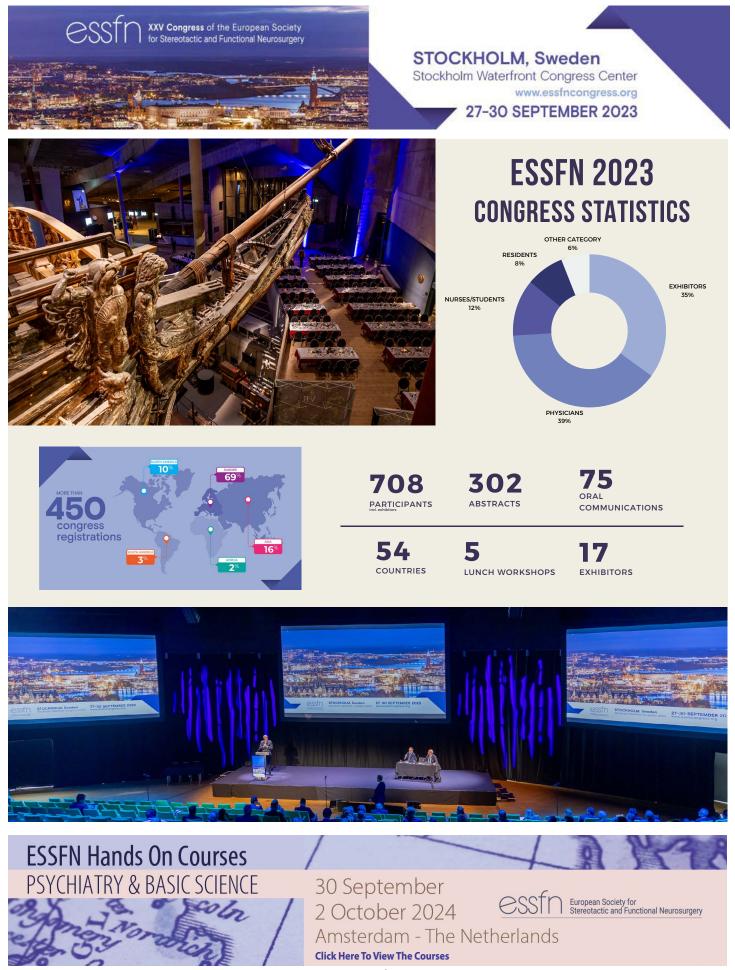
and neurorehabilitation joined the 3 workshops. The program this year focused on multidisciplinary approaches and management of different functional neurosurgery disorders. Speakers and instructors from other specialties were invited to present valuable lectures. 472 attendees registered including 15 WSSFN members.

Professor Ahmed Raslan – Chairman of Department of Neurosurgery, OHSU- Portland participated via live stream presentation in the Plenary session and presented state of the art data on neural interfaces. Prof. Fadi Almahriq, Professor of Neurosurgery, Croatia, also participated in the SFN workshop, sharing teaching and mentoring experience. He presented a Keynote lecture in DBS SFN Session.

In the Closing Ceremony, The ESNS – Board of Directors made a generous recognition of Prof. Walid Abdel Ghany as a president of MSSFN and ESNS-SFN section for the outstanding success of the workshops and Sessions.



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THE SPEAKER

DOCTOR AHMED RASLAN

Professor of Neurological Surgery at OHSU. President-Elect of NANS

WEBINAR #19

Spinal Cord Stimulation Technologies:

Foundational differences and Implications on use.



by **Dr. Ahmed Raslan** 26th March, 2024

This and other recorded webinars are available to WSSFN members on https://www.wssfn.org/webinars

Dear Colleagues, dear friends,

It is our distinct pleasure to invite you to the *2nd Psychiatric Surgery Summit (PSS2024)* in Freiburg on 24th-26th of October 2024.

The PSS is essentially a working meeting. Experts in the field of Deep Brain Stimulation for psychiatric indications will meet for two and a half days of intense and in-depth discussion about this burgeoning field. We have invited internationally renowned faculty from the fields of Psychiatry, Neurology, Neurosurgery, Neurophysiology, Microsystem Engineering, and more.

After our first summit in 2022, there was a tremendous positive response and appreciation for the event. We have therefore decided to hold this meeting on a biannual basis.

PSS2024 is intended for Psychiatrists, Neurologists, Neurosurgeons, Neuroscientists, DBS staff, and graduate students. This is a hybrid meeting for working and discussion. Registration will be performed on a first-come, first-served basis.

The meeting is endorsed by the ESSFN and WSSFN, and reduced admission fees for members will apply.

We very much look forward to welcoming you to our beautiful city, Freiburg, in the fall of 2024, either on-site or online.

Thomas E. Schläpfer, M.D.

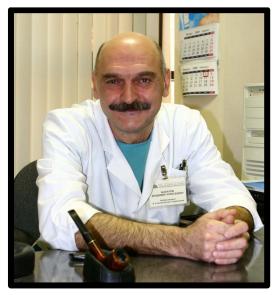
Volker A. Coenen, M.D.

Bastian E.A. Sajonz, M.D., M.Sc. (Congress Secretary)

For more information go to: https://www.uniklinik-freiburg.de/pss2024.html or click the link below.



In Rememberance...



VLADIMIR ALEXEEVICH SHABALOV 19.05.1953-18.01.2024

On January 18, 2024, at the age of 71, the distinguished neurosurgeon and Doctor of Medical Sciences, Professor Vladimir Alexeevich Shabalov, passed away.

After graduating from the medical faculty of the 2nd Moscow Medical Institute named after N.I. Pirogov, Vladimir Alexeevich began his neurosurgery training in 1976. In 1978, he joined the doctoral program in neurosurgery. Professor Shabalov's professional and academic career was closely linked with the Moscow Institute of Neurosurgery, where he focused on the development of functional neurosurgery, making him the leading scientific researcher he was.

Vladimir Alexeevich was a pioneer in the application of modern neurostimulation methods for the brain, spinal cord, and peripheral nerves. He also pioneered intrathecal baclofen therapy for extrapyramidal disorders, among other advancements. Over the

years, he carried out over 1,000 functional neurosurgical interventions. As a scientist, he not only engaged in practical activities but also made a significant contribution to the development of native systems for electrical stimulation of the brain and spinal cord. His scientific work was presented in more than 100 academic papers published in national and international journals.

Professor Shabalov raised a whole generation of functional neurosurgeons. His students deeply mourn his passing and will always keep an infinitely bright memory of their mentor.

