

# Stereotactic and Functional NEUROSURGERY NEWS



Spring 2012

AANS/CNS Section on Stereotactic and Functional Neurosurgery and  
American Society for Stereotactic and Functional Neurosurgery

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## Message from the President



Ali R. Rezai, MD, FAANS

Dear Colleagues,  
It has been a great privilege and honor to be the President of the American Society of Stereotactic and Functional Neurosurgery (ASSFN) for the past two years. Our society is strong and

vibrant, and as one of the most rapidly growing areas in neurosurgery, our specialty offers tremendous potential in helping a large number of patients. While my presidency will end at this year's ASSFN meeting in San Francisco, I am enthusiastic about the future of our society being in the capable leadership and guidance of Konstantin Slavin, MD, FAANS; Aviva Abosch, MD, PhD, FAANS; Emad Eskandar MD, FAANS, and our talented Board of Directors.

We are excited about the upcoming ASSFN meeting in San Francisco, June 3-6, 2012 — this promises to be the one of the best meetings in stereotactic and functional neurosurgery. A record 168 scientific abstracts were submitted for this meeting, and ASSFN Annual Meeting Chair Philip Starr, MD, PhD, FAANS, and the scientific program committee have done an outstanding job to create a cutting edge and exceptional scientific program. We have renowned faculty from across the world as our invited speakers, as well as open platform and poster presentations covering all the major areas of stereotactic and functional neurosurgery including movement disorders, psychiatric disease, neuroimaging, epilepsy, neuroprosthetics, radiosurgery, pain, and technology transfer. In addition, there will be workshops on deep brain stimulation, electrocorticography, and the spectrum of functional neurosurgery for residents and fellows. The meeting is being held at the

spectacular Fairmont Hotel, which has stunning views of San Francisco and the bay.

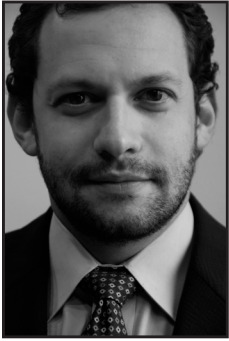
The ASSFN also is now fully incorporated as an independent nonprofit organization. This places the society on sound legal footing, and allows us to function as a voluntary nonprofit organization committed to advancing stereotactic and functional neurosurgery through meetings, education, research, and outreach. This incorporation was achieved through the hard work of Peter Konrad, MD, PhD, FAANS; ASSFN legal counsel Elizabeth Sillay, and many others.

In keeping with the rapidly changing field, we are pleased to have launched the new ASSFN website, spearheaded by our webmaster, Kendall Lee, MD, PhD, FAANS, and the website committee. Our goal is to provide our members with a more personalized website featuring ease of access to up-to-date information, online educational offerings, fellowships, practice tools, guidelines and outcome measures. Site visitors also can access links to technology and innovation topics, in addition to information on socioeconomic, government and regulatory issues. Please visit our website at [www.assfn.org](http://www.assfn.org).

Education continues to be fundamentally important for our specialty, and we have contributed to national efforts in devising a core neurosurgical curriculum. The society sponsors and coordinates many educational programs. For example, the upcoming ASSFN meeting has a workshop devoted to resident and fellow education. In addition, section events at the Congress of Neurological Surgeons (CNS) and the American Association of Neurological Surgeons (AANS) annual meetings consistently have provided comprehensive, cutting-edge, high-tech and insightful topics and speakers, with an emphasis on high-quality scientific exchange and discussion. We will strive to provide first-rate, up-

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# Feature Profile



**Brian Harris Kopell, MD, FAANS**

In each of the ASSFN newsletters, we will profile one of the rising leaders in neurosurgery. In this issue, we would like to introduce you to Brian Kopell, MD, FAANS.

A native New Yorker, Dr. Kopell earned his BA from the University of Pennsylvania in 1992. He then earned his MD at New York University School of Medicine. He completed his residency training at New York University Medical Center in 2003. Dr. Kopell has had a number of fellowships in stereotactic and functional neurosurgery, including fellowships at New York University Medical Center and University Hospital in Zurich, Switzerland. Additional fellowships include one in functional and restorative neurosurgery at the Cleveland Clinic and a fellowship in neurosurgery for pain disorders at University Hospital in Ankara, Turkey. After completing his training, Dr. Kopell has held academic appointments as an assistant professor in the Departments of Neurosurgery and Psychiatry at the Medical College of Wisconsin in Milwaukee. He recently has taken a position as associate professor for the Departments of Neurosurgery, Neurology, Psychiatry and Neuroscience at Mount Sinai School of Medicine in New York.

Dr. Kopell has been involved as co-principal investigator or investigator in a number of clinical trial investigations. He has contributed to numerous peer reviewed publications and textbooks, and has been an invited lecturer at numerous national and international meetings. Along with his busy clinical and academic schedule, he finds time for active membership in many societies such as the American Association of Neurological Surgeons (AANS), American Pain Society (APS) and Congress of Neurological Surgeons (CNS). Dr. Kopell also is on the Board of Directors for ASSFN and the Joint AANS/CNS Section for Stereotactic and Functional Neurosurgery.

Dr. Kopell provided insight into his training and practice through the following interview.

## **How did you become interested in neurosurgery?**

To paraphrase Ray Liotta's character in *Goodfellas*, "As far back as I can remember, I always wanted to be a brain surgeon." Being a child of the '70s, I fell in love with NASA and the Apollo program, but the realization that I was easily carsick and hated roller coasters put the kibosh on my career as an astronaut. Neurosurgery had that allure without the physical G forces.

## **The scope of your training took you to several countries where you pursued fellowships. Was the training different internationally?**

The training situations I had internationally were really more [like apprenticeships] so I have little insight into the formal training process overseas.

## **You have had an interest in psychiatry. How did your interest develop in relation to neurosurgery?**

The psychiatric illnesses are really the most human of neurological maladies. They really speak to the essence of what it is to be human and the unique experiences we have. Being able to address these problems from a neurosurgical point of view is extremely gratifying as the suffering of these patients is staggering.

## **Are there other technologies that are of interest to you?**

I have a particular interest in cortical stimulation as a neuromodulation modality. As such, I am interested in such technologies as MEG (magnetoencephalography) and TMS (transcranial magnetic stimulation) both of which are tied to cortical physiology.

## **What do you think are the unique challenges that the functional neurosurgery field faces?**

Functional neurosurgery/neuromodulation faces a particular challenge right now [...] Our field has been particularly hit by the economy and the complete gutting of the venture capital industry with regards to PMA (pre-market approval)-type projects. Furthermore, the failure of several high-profile, pivotal trials over the past 10 years has left us with a dearth of procedures that are covered by conventional medical insurance. A CPT coding system that is antiquated and severely underestimates the work and expertise needed to perform our procedures further compounds this issue. This is particularly tough on those of us in academic departments where administrators largely look upon our discipline as a "money-loser" despite being integral to a healthy neurosurgery department. I think there is no other field in neurosurgery that has such financial pressures as on those of us who focus primarily on functional neurosurgery.

## **Would you share some of your personal interests outside of medicine?**

Comic books and commodities-trading.

## **Phillip Gildenberg Award**

During the recent American Association of Neurological Surgeons (AANS) Annual Scientific Meeting in Miami, which took place April 14-18, 2012, Sameer Sheth, MD, PhD, was honored with the Phillip Gildenberg Award. The award was presented by ASSFN president Ali Rezai, MD, FAANS, during the Stereotactic and Functional Section Session at the 81st AANS Annual Scientific Meeting. Dr. Sheth received the distinction prior to his plenary session lecture, titled "Reward Prediction Encoded by Single-Neuron Responses in the Human Nucleus Accumbens."



# Psychiatric Neurosurgery Committee

Surgery for psychiatric disorders is becoming an increasingly important part of functional neurosurgery clinical research. Several pilot studies of deep brain stimulation (DBS) for depression have led to multiple active large, multi-center studies of this methodology. DBS for Tourette syndrome has been tested in isolated studies for many years, and other applications, such as pilot trials for drug addiction, are currently being initiated. The approval of DBS for obsessive-compulsive disorder (OCD) through the humanitarian device exception (HDE) mechanism by the U.S. Food and Drug Administration (FDA) was a milestone, as this was the first market approval for a neurosurgical device specifically labeled for treatment of a psychiatric disorder. This also has created controversy, based in part on misconceptions regarding the intent and proper application of the HDE mechanism as well as broader concerns among various constituencies regarding the development of novel neuromodulation procedure for psychiatric disorders.

Recognizing the importance of this emerging area to the future of neurosurgical clinical research and patient care, the leadership of the ASSFN has created the Psychiatric Neurosurgery Committee. The goal of this committee is to foster responsible development of psychiatric neurosurgery through education; to connect with other relevant medical specialty groups and interested investigators; to facilitate interaction with government agencies as needed; and to provide critical evaluation of evolving issues and/or concerns which may affect this area. The committee co-chairs are Emad Eskandar, MD, FAANS, and Michael Kaplitt, MD, PhD, FAANS, and other ASSFN members include Aviva Abosch, MD, PhD, FAANS; Robert Gross, MD, PhD, FAANS; Brian Kopell, MD, FAANS; Ali Rezai, MD, FAANS; and Konstantin Slavin, MD, FAANS. In addition, several allied specialists have agreed to join the committee. These individuals include Darin Dougherty, MD (Assistant Professor of Psychiatry, Harvard Medical School), Wayne Goodman, MD (Chair of Psychiatry, Mt. Sinai School of Medicine), Benjamin Greenberg, MD, PhD (Associate Professor of Psychiatry, Brown University) and Donald Malone, MD (Chair of Psychiatry and Psychology, Cleveland Clinic). Each of these individuals brings specific expertise and experience in neuromodulation for various psychiatric disorders, including OCD and depression. The committee also is currently seeking additional members, particularly in bioethics, and welcomes suggestions.

The initial meeting of the committee took place in June 2011. There was a discussion of recent publications questioning the use of the HDE mechanism to obtain market approval of DBS for OCD. It also was noted that the FDA had more recently published a review of the process and response to these articles, clarifying what appeared to be certain misconceptions regarding the HDE process. In particular, the committee took note that in the two years since approval, roughly 50 DBS procedures for OCD have been

performed, suggesting that this does represent the small population of patients envisioned in the HDE mechanism. The committee further noted that the HDE regulations prevent companies from profiting from devices marketed under this mechanism.

Action items currently in process that were agreed upon at that initial meeting include the following:

1. Development of an initial group product related to the regulatory aspects of the HDE process, including the history and rationale for the HDE, requirements for achieving an HDE and regulatory restrictions for marketing under an HDE, with an emphasis on but not exclusively focused upon the HDE for OCD. Dr. Goodman had already developed a manuscript in this area with ASSFN member Ron Alterman, MD, and Drs. Alterman and Goodman agreed that this could be used as a basis for the broader document to be developed by the committee.
2. To establish liaisons with other relevant organizations and committees. An initial discussion in this regard has already taken place with Bart Nuttin, MD, who leads a similar committee recently established by the World Society for Stereotactic and Functional Neurosurgery.
3. To more broadly assess emerging trends in psychiatric surgery, areas of scientific promise, ethical concerns such as patient capacity and consent, conflict of interest, collaboration with industry and regulatory issues which may affect development of this field. The committee plans to develop documents in each of these areas over time, in collaboration with outside experts and other organizations as appropriate. These will serve as a basis for the ASSFN leadership and the larger ASSFN membership to use as positions for organized functional neurosurgery.

The activities of the committee are designed to support the goals of the ASSFN membership to advance the science of functional neurosurgery, and to provide advanced and effective therapies for patients with brain disorders, including psychiatric disorders, which might optimally benefit from our expertise. Any suggestions for the committee are welcome, and the committee encourages participation by any member with a strong interest in this area. Any ASSFN member who would like to assist in any of these activities, or any member who would like to contact the committee for assistance or guidance, should contact either Dr. Kaplitt or Dr. Eskandar directly. We look forward to reporting further progress in this exciting area in future ASSFN newsletters.

Emad Eskandar, MD, FAANS; and Michael Kaplitt, MD, PhD, FAANS  
Co-Chairs, Psychiatric Neurosurgery Committee

# Website Committee Update

In collaboration with Citassa Software and its chief executive officer, Mr. Sean Stasica, the ASSFN has updated its website with new functionalities, which include the ability to submit abstracts for the upcoming ASSFN meeting and the ability for abstract reviewers to vote online. Peter Konrad, MD, PhD, FAANS, has been assisting from the meetings committee with regards to the abstract center.

With these improvements, traffic to the ASSFN website has increased 750 percent in the last 10 months, with the number of site visitors increasing 300 percent. There also has been a consistent

monthly increase in traffic averaging 25 percent per month. In the last month alone, there were 1,621 visits from 1,084 unique visitors logging on from all over the world. Countries that registered the most visits to the ASSFN site are, beginning with most visits: the United States; Canada; Brazil; India; China; Saudi Arabia; Australia; the United Kingdom; and Russia.

Future website upgrades include online ASSFN membership applications and online payment integration with PayPal.

Kendall H. Lee, MD, PhD, FAANS

## President *continued from page 1*

to-date, innovative, creative and practical educational programs for our specialty in the future.

The society membership continues to expand, and we also have created a new associate member category for interested scientists, clinicians, engineers, and others who are not stereotactic and functional neurosurgeons. Our field is multidisciplinary, and it is important to work closely and collaborate with our neurology, psychiatry, neuroradiology, pain management, neuroscience, engineering, and other industry-related colleagues to advance the field through education, research, innovation, and advocacy. Please encourage your colleagues in these disciplines to become a member of our society. Those interested in joining ASSFN can do so by selecting the "Membership" tab on [www.assfn.org](http://www.assfn.org). In addition, I invite all of you who would like to be more involved in our society to volunteer to work with our various committees such as the education, guidelines, website and others. Our society is dependent on volunteers, and your participation, support and ideas are important and most welcome.

We also are very proud of the continuous progress of our journal, *Stereotactic and Functional Neurosurgery*. Our Editor, David W. Roberts, MD, FAANS, and the editorial board have worked tirelessly and admirably to improve our journal, for which there has been an increased number of high-quality submissions and a strong impact factor to make it the premier journal of our specialty. I encourage all of you to submit manuscripts of your work to our journal.

Again, it has been a great privilege and honor to be the President of our society for the past two years and I would like to thank you very much for the opportunity to serve you in this capacity. Over the next two years in my new role as Past-President, I will work hard and give it my all to help our society and our specialty. I am confident in the ability, vision, and leadership of our officers and Board of Directors to take our dynamic society and specialty to new heights, and to promote stereotactic and functional neurosurgery globally.

Sincerely,  
Ali R. Rezai, MD, FAANS

## ASSFN Meeting, June 3-6, 2012 San Francisco

If you haven't already done so, please plan to attend the upcoming ASSFN Biennial Meeting. There are three satellite symposia taking place the afternoon of Sunday, June 3, 2012.

- **For nursing and neurology professionals:** DBS: A Practical Course for Neurologists, Nurse Practitioners and Physicians' Assistants
- **For residents and fellows:** The Spectrum of Stereotactic and Functional Neurosurgery for Residents and Fellows (Exclusively for trainees, this new course allows residents and fellows to interact closely with top practitioners of our subspecialty.)
- **For non-neurosurgeons and neurosurgeons:** Electrocorticography in Basic Neuroscience Research

For details on these workshops and other events at the ASSFN Biennial Meeting, visit [www.assfn.org](http://www.assfn.org).

ASSFN leadership looks forward seeing you in San Francisco.  
Philip Starr, MD, PhD, FAANS  
Meeting Chair  
ASSFN Scientific Program Committee

## American Society for Stereotactic and Functional Neurosurgery Application for New Membership

Name \_\_\_\_\_

Office Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Country \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_ E-mail \_\_\_\_\_

Residency training program: \_\_\_\_\_ Years: \_\_\_\_\_

Medical School: \_\_\_\_\_

Specialty (circle):    Neurosurgery    Neurology    Other: \_\_\_\_\_

AANS Member     Yes     No                    CNS Member     Yes     No

Interests in Stereotactic and Functional Neurosurgery: (please circle)

Movement Disorders                    Pain                    Epilepsy                    Psychosurgery  
Biomedical engineering                    Tumors                    Radiosurgery                    Image guidance

Determine and circle your membership category:

Category	Yearly Fee	Description
Active	\$325	For practicing neurosurgeons in the USA or Canada who have completed residency/fellowship
Resident/fellow	\$25	One time fee (not yearly). For neurosurgical trainees currently in residency or fellowship
Senior	Free	For neurosurgeons who are retired and over 65 years old
Associate	\$50	For non-neurosurgeons

The benefits of active membership include:

- Membership in the AANS/CNS Section on Stereotactic and Functional Neurosurgery
- Membership in the World Society for Stereotactic and Functional Neurosurgery
- Reduced fees for the biennial ASSFN meetings
- Subscription to *Stereotactic and Functional Neurosurgery* (including on-line access)

The benefits of all other membership categories are:

- Membership in the AANS/CNS Section on Stereotactic and Functional Neurosurgery
- Reduced fees for the biennial ASSFN meetings
- Eligibility to subscribe to *Stereotactic and Functional Neurosurgery* at a reduced rate. If you are joining as a resident/fellow, associate, or senior member and wish to have the journal subscription, the fee is \$135. Please check this box:
  - YES I would like to receive the society journal at the reduced rate

There are two ways to become an ASSFN member:

- Apply online at [www.MyAANS.org](http://www.MyAANS.org) (for Active Member applications only)
- Mail or fax this application form to ASSFN  
c/o Melody Dian  
ASSFN Administrator  
419 Oak Street West  
Frederic, WI 54837  
Fax at 866-362-1101

**All applicants will be invoiced through AANS once the application has been approved.**

For questions or concerns, contact the ASSFN administrator Melody Dian [mdian@centurytel.net](mailto:mdian@centurytel.net), secretary-treasurer, Aviva Abosch ([aabosch@umn.edu](mailto:aabosch@umn.edu)), or the membership chairman, Emad Eskandar, ([eeskandar@partners.org](mailto:eeskandar@partners.org)).

## **ASSFN–AANS/CNS Section on Stereotactic and Functional Neurosurgery**

5550 Meadowbrook Drive  
Rolling Meadows, Illinois 60008

### **ASSFN Officers and Executive Council**

#### **Officers**

Ali R. Rezai, MD, FAANS  
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Konstantin V. Slavin, MD, FAANS  
*Vice-President*

Aviva Abosch, MD, PhD, FAANS  
*Secretary-Treasurer*

Philip A. Starr, MD, PhD, FAANS  
*Past President*

#### **Executive Council**

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Clement Hamani, MD, PhD (2010-2014)  
Christopher R. Honey, MD (2008-2012)  
Michael G. Kaplitt, MD, PhD, FAANS (2010-2014)  
Peter Konrad, MD, PhD, FAANS (2010-2014)  
Brian H. Kopell, MD, FAANS (2008-2012)  
Kendall Lee, MD, PhD, FAANS (2010-2014)  
Alon Y. Mogilner, MD, PhD, FAANS (2008-2012)  
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