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From the Chairman



Frederick F. Lang,
MD, FAANS, FACS

One quality that always has impressed me about neurosurgeons is their devotion to excellence. Serving as Chair of the AANS/CNS Section on Tumors has confirmed this impression. As you will learn in this Newsletter, there has been much activity within the Section.

All these initiatives are the result of the overall excellence of the members in the Section on Tumors, whose efforts have exceeded expectations and continue to make the Section one of the premier neuro-oncological groups in the world. I thank everyone who has worked so hard for the Section over the past year.

One of our most outstanding members was Abhijit Guha, MD, FAANS. Unfortunately, Ab passed away on Nov. 8, 2011, after a three-year fight against acute myelocytic leukemia (AML). Ab was the Alan and Susan Hudson Professor of Neuro-Oncology, at the University of Toronto. He was an outstanding neurosurgeon, an active laboratory researcher, and a mentor to numerous postdoctoral fellows, residents and students. Ab was an active member of the Section on Tumors and he organized multiple educational sessions for the Section. He was also active in our sister organization, the Society for Neuro-Oncology (SNO), serving as its sixth President. Born in Kolkata, India, Ab established the Neuroscience Institute in Kolkata, where he frequently traveled to operate on patients and to teach the faculty there about research. Ab's death was a great loss to us all individually and collectively

as a Section. Therefore, in order to honor Ab's legacy, the Section on Tumors, in conjunction with SNO, has established the "Abhijit Guha Award and Lecture." This award will recognize an accomplished investigator who achieves significant results both in the laboratory and the clinic, and who embodies the collaborative and volunteer spirit of Ab Guha. This award will be presented yearly, alternating between the SNO Annual meeting and Tumor Section meetings, with the first award being given at the 2012 meeting of the Society for Neuro-Oncology. Ab was a friend, colleague and mentor to many of us, and he will be greatly missed. I feel personally blessed to have known him. Hopefully, this award will serve as a reminder of the excellence of this great man.

Consistent with the theme of excellence, I would like to thank all Section members who participated in and contributed to the 9th Biennial Satellite Tumor Symposium, which was held in conjunction with the Society for Neuro-Oncology Annual Meeting Nov. 17-20, 2011, in Anaheim, Calif. The meeting received high reviews, as 125 Tumor Section members attended this meeting and 67 members presented abstracts. The Section thanks Michael Vogelbaum, MD, PhD, FAANS, for his untiring effort as the Tumor Section Co-Chairman of the Scientific Program Committee. The Section also thanks all the members who participated in the many "Sunrise Sessions" as expert speakers, as well as all the speakers at the one-day workshop on clinical trials. In addition, the Section thanks Jason Sheehan, MD, PhD, FAANS, who helped organize the Education Day, which focused on

SANS: The Extent of Tumor and Radiosurgery Knowledge Gaps

Jason Sheehan, MD, PhD, FAANS; and Sarah Jost, MD

The wealth of information in neurosurgery has increased substantially. Also, neurosurgery is becoming more subspecialized. Identification of knowledge gaps within neurosurgery will play an important role in medical education for practicing neurosurgeons and trainees.

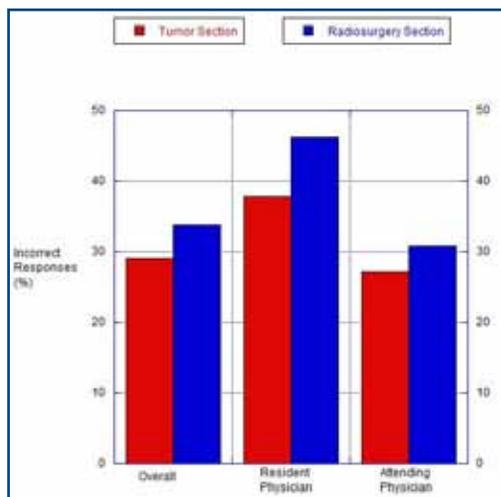
The Self-Assessment in Neurological Surgery (SANS) has been utilized for more than 25 years as a neurosurgical learning tool, while concurrently serving as a continuing medical education (CME) resource. More recently, SANS has become an important part of the maintenance of certification (MOC) process for the American Board of Neurological Surgeons (ABNS). SANS questions adhere to the format guidelines of the National Board of Medical Examiners (NBME). Each question is thoroughly vetted and periodically evaluated for test performance attributes.

Over the past two years, 1,260 neurosurgeons have taken the general SANS examination. This group was comprised of 267 resident physicians and 993 attending physicians. SANS records first click responses to each question were evaluated with regard to tumor and stereotactic radiosurgery categories.

In the entire cohort of test takers, incorrect responses were observed in radiosurgery and tumor questions 33.7 percent and 29.1 percent of the time. For the Tumor Section, the incorrect response for residents was 37.8 percent, whereas it was 27.1 percent for attending physicians. For radiosurgery, the difference was

more striking with residents responding incorrectly 46.3 percent of the time, whereas attending responded incorrectly only 30.8 percent of the time. Of the 18 categories tested in SANS, radiosurgery ranked among the top

five categories in terms of most incorrect responses. Although test content could explain some of these findings, the degree of incorrect response suggests the presence of significant knowledge gaps in the areas of radiosurgery and tumors amongst neurosurgeons. Such findings could be utilized to plan for education programs for national meetings or residency/fellowship training.



Chairman *continued from page 1*

spinal radiosurgery. Lastly, the section is indebted to Andrew Parsa, MD, PhD, FAANS, who single-handedly made the meeting a financial success. At this meeting, the excellence of the Section was clearly evident to the neuro-oncology community at-large.

Of course with the publication of this Newsletter, many of you probably are preparing to attend the 2012 AANS Annual Scientific Meeting being held in Miami, April 14-18. As always, the Tumor Section has put together outstanding educational events for this meeting. Ricardo Komotar, MD, the Chair of the 2012 AANS Tumor Section Program Committee, has organized a clinical symposium entitled “Difficult Meningiomas – Current Treatment Paradigms,” which will focus on the surgical management of meningiomas that are challenging to treat because of their location, high grade pathology or repeated recurrence. A second translational-science symposium, entitled “Advances in Brain Tumor Diagnosis, Imaging, and Monitoring,” will examine state-of-the-art methods for monitoring brain tumor diagnosis and treatment, including assessing circulating tumor cells and exosomes, using immunological methods for defining tumor recurrence, and applying advanced imaging methods to assess histology and tumor grade. We encourage all to attend what undoubtedly will be some outstanding educational symposia.

I also would like to recognize the excellence of our international

colleagues. Every year for the past five years, the Section has received grant applications for the Section on Tumors/Brainlab International Fellowship. This fellowship was the brain-child of past-Chair Ronald Warnick, MD, FAANS, and has been a successful program, whereby neurosurgeons from outside the U.S. and Canada receive funding for undertaking a year of clinical, translational, or basic science research in the U.S. This fellowship is fully funded by the generosity of Brainlab, Inc. International members must submit a grant application, which is rigorously reviewed by section executive committee members. William Curry Jr., MD, FAANS, currently oversees this fellowship for the Section. This year the committee has selected Tal Shahar, MD, from Israel for his project, “Mesenchymal stem cells as natural biofactories for nanosized exosomes carrying micro-RNAs.” Dr. Shahar will begin his fellowship in July 2012.

Lastly, I would like to take this opportunity to invite all of you, particularly young neurosurgeons and our international members, to a Tumor Section reception, which will be held at the AANS Annual Scientific Meeting on April 17, 2012. Allen Waziri, MD, has worked hard to put together a fun reception for all to meet and mingle. Jacques Morcos, MD, FAANS, FACS, will speak at this reception on career development for young neurosurgeons, with insights for international members. I hope to see you all there.

Medical Neuro-Oncology/Society of Neuro-Oncology Liaison Report

Susan Chang, MD

The second Joint Meeting of the Society for Neuro-Oncology (SNO) and the American Association of Neurological Surgeons (AANS)/Congress of Neurological Surgeons (CNS) Section on Tumors (SOT) was held in Anaheim, Calif. in November 2011. Through the collaboration, planning and leadership of Jeffrey Bruce, MD, FAANS, FACS; and Frederick Lang Jr., MD, FAANS, this was a very successful meeting with respect to the educational value provided to the members of the two organizations. Michael Vogelbaum, MD, PhD, FAANS, from the SOT and Tim Cloughesy, MD, from SNO were the scientific chairs for the meeting, and Eric Chang, MD, Arjun Sahgal, and Jason Sheehan, MD, PhD, FAANS, served as co-chairs for the educational day that highlighted Stereotactic Radiosurgery and Radiation Biology in the CNS as the major theme. One-hundred percent of the exhibit fees and support secured for the meeting was retained by the respective groups, and Andrew Parsa, MD, PhD, FAANS, led an impressive fund raising effort on behalf of SOT.

Several members of the tumor section have been nominated to key leadership positions in SNO including Dr. Frederick Lang (past president), Dr. Michael Vogelbaum (vice president), Dr. Andrew

Parsa (neurosurgical representative on the board of directors) and Ennio Antonio Chiocca, MD, PhD, FAANS (scientific chair of the 2012 Annual Meeting to be held in Washington, D.C.). This strong contribution ensures the success of the society's emphasis on multidisciplinary collaboration in research and educational endeavors.

Over the last few years, there has been an international effort to standardize criteria for imaging and clinical response assessment in neuro-oncology. Dr. Michael Vogelbaum and several members of the SOT have proposed criteria for surgically based trials (M.A. Vogelbaum et al: Application of novel response/progression measures for surgically delivered therapies for gliomas: Response Assessment in Neuro-Oncology (RANO) Working Group. *Neurosurgery* 2012 Jan;70(1):234-43; discussion 243-4.), and criteria for meningioma trials are being developed. In addition, the challenges of trial endpoint and assessment of efficacy of solid tumor brain metastases are being addressed, and members of the SOT, including Steven Kalkanis, MD, FAANS, who was instrumental in the development of the evidence-based guidelines for the management of brain metastases, are involved in this effort.

First Cranial Module for N²QOD

Mark E. Linskey, MD, FAANS

The National Neurosurgery Quality Outcomes Database (N²QOD) organized through NeuroPoint Alliance (NPA) has already rolled out its first prospective registry database for degenerative lumbar spine; and is nearly ready to bring forward its second module for degenerative cervical spine. The NPA Board has tasked the N²QOD Scientific Advisory Committee with coming up with a cranial module as its third planned prospective registry database. They have decided to focus the first cranial module on brain tumors and have tasked the Tumor Section with designing the module. Over both the fall and winter, the Tumor Section Outcomes Committee has met and extensively reviewed the design paradigms utilized for the first two spine modules. In a parallel design, the brain tumor cranial module will contain patient variables, clinical variables, structural variables and surgical variables. The registry will look at 30-day quality, three-month quality, and 12-month quality using a combination of process measures along with validated outcome and quality of life measures related to brain tumors.

The rough draft of the cranial module is nearing completion and should be ready to present in preliminary form to the N²QOD Scientific Advisory Committee when it meets during the AANS Annual Scientific Meeting in April 2012. The members of the Tumor Section Outcomes Committee are Dr. Mark Linskey; Fred Barker, MD, FAANS, FACS; Steve Kalkanis, MD, FAANS; Jason Sheehan, MD, PhD, FAANS; and Andrew Sloan, MD, FAANS. Anyone else in the Tumor Section interested in participating in this effort is encouraged to contact Dr. Mark Linskey at mlinskey@uci.edu.

Awards and Education Report

Andrew T. Parsa, MD, PhD, FAANS

The AANS/CNS Section on Tumors continues to have more than 300 abstract submissions for each meeting and several well-attended practical courses. The majority of authors submitting abstracts apply for a variety of awards, and prior to each meeting a group of dedicated Tumor Section members read each abstract and grade them. The highest scoring abstracts for each award are then further reviewed to determine eligibility and to identify the award-winning authors. We are grateful to the sponsors who support these awards. The 2011 CNS awards for the Section on Tumors are listed below:

Journal of Neuro-Oncology Award:

Stephen Skirboll, MD, FAANS

The *Journal of Neuro-Oncology* Award is sponsored by Kluwer Academic Publishers and is presented at the annual AANS and CNS meeting to a highly ranked abstract in either clinical or basic science as related to neurooncology. A one-year subscription to the *Journal of Neuro-Oncology* and a framed certificate are awarded.



Mahaley Clinical Award:

William Curry, MD, FAANS

The Mahaley Award is given at each of the AANS and CNS meetings to a neurosurgery resident, fellow or attending who submits the best clinical study in neuro-oncology. The recipient is awarded a \$1,000 honorarium.



Preuss Award:

Kyle Weaver, MD, FAANS

The Preuss Award, sponsored by the Preuss Foundation, is given at each of the AANS and CNS meetings to a young scientist investigating brain tumors, within 10 years of training, who has



submitted the best basic science research paper. This award has a \$1,000 honorarium.

Young Investigator Award:

Costas Hadjipanayis, MD, PhD, FAANS
Sponsored by the American Brain Tumor Association, the Young Investigator Award is given at each AANS and CNS meeting to a young faculty member involved in neuro-oncology research who has demonstrated outstanding potential for future basic science research. The applicant must have been out of training for fewer than six years.



The Integra Foundation Award:

Jason Sheehan, MD, PhD, FAANS
The Integra Foundation Award, sponsored by the Integra Foundation, is given at each of the AANS and CNS meetings for the best research or clinical paper. There is a monetary award of \$1,000.



Synthes Skull Base Award:

Nicholas Szerlip, MD
The Synthes Skull Base Award is given to an attending neurosurgeon, resident or fellow within the Tumor Section who submits the best abstract related to skull base surgery. This award is given at the annual meetings of the AANS and CNS. The award includes a \$1,000 honorarium.



Stryker Neuro-Oncology Award:

Orin Bloch, MD

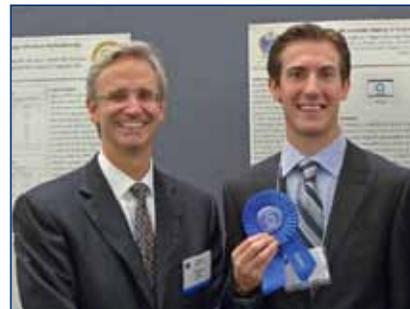
This award, presented at both the AANS and CNS meetings, is given to a high-ranking brain tumor clinical or basic science abstract submitted by a resident or medical student. The senior author on the paper must be a member of the Section on Tumors. A monetary component of \$1,000 is included with an award certificate.



Best Poster Award at the CNS:

Ziev Moses, MSIV

This award presented at the CNS poster session honors the highest ranking abstract in the Tumor Section for basic science or clinical work. Eligibility is not restricted to Tumor Section members only. There is a monetary award of \$500.



Weill Cornell Brain and Spine Center

and the Weill Cornell Cancer Center *present*

The Brain Tumor Biotech Summit

Bringing together the nation's top cancer specialists and the investment community to promote innovative therapies for brain tumors.

June 8, 2012

at Weill Cornell Medical College, New York City

Network with researchers, oncologists, surgeons, analysts, venture capitalists, hedge fund managers, and leaders in the biotech and pharmaceutical industries.

Get the latest updates on cancer treatments, including:

- Gene therapy, stem cell therapies, and angiogenesis
- Vaccine therapies
- Nanotechnology
- New devices and delivery systems
- Targeted therapeutics

**Opening Keynote Address by
Frederick F. Lang, MD
Chair, AANS/CNS Tumor Section
MD Anderson Cancer Center**

For more information, visit www.cornellneurosurgery.org/braintumor or contact host John A. Boockvar, MD, Director of the Weill Cornell Brain Tumor and Stem Cell Research Lab, at jab2029@med.cornell.edu

Upcoming AANS Scientific Meeting Highlights

Ricardo Komotar, MD

Tumor Section I:

Complex meningiomas may lead to difficult treatment paradigms. However, advances in endovascular technology, skull base approaches, adjuvant radiotherapy and novel chemotherapeutic agents have significantly improved the management of these lesions. To highlight these techniques and their clinical implications, the Tumor Section will host a group of experts during the afternoon session on Tuesday, April 17, 2012, at the AANS Annual Scientific Meeting in Miami. The session is entitled, "Difficult Meningiomas – Current Treatment Paradigms," organized and moderated by Dr. Ricardo Komotar and Antonio Chiocca, MD, PhD, FAANS. The session will cover five topics: preoperative embolization, skull base approaches, management of complications, radiotherapy and chemotherapeutic options. Howard Riina, MD, FAANS, will review the role of preoperative embolization for these lesions. Then, we welcome Jacques Morcos, MD, FAANS, FACS, from the University of Miami, who will present his skull base approaches to these difficult lesions. Johnny Delashaw, MD, FAANS, will report on the impact of complications and how to avoid them; and then Phil Gutin, MD, FAANS, from Memorial Sloan-Kettering Cancer Center will discuss the use of adjuvant radiotherapy for atypical meningiomas. Finally, we look forward to Susan Chang, MD, who will describe her work with novel chemotherapy options in this patient population. As tumor neurosurgeons, the importance of aggressive and safe surgical resection of these complex lesions, followed by targeted and directed radiotherapy and chemotherapy, has never been greater. We look forward to a timely update on this important topic.

Tumor Section Membership Continues to Grow

Allen Waziri, MD

Membership in the AANS/CNS Section on Tumors continues to expand, encompassing a nearly 7 percent increase in Active Membership since the fall of 2011. This year we hope to continue the recruitment of new members to the Section by focusing on attracting colleagues from the international neurosurgical community as well as new graduates from American neurosurgical residencies.

Major pursuit of this goal will be initiated during a joint reception of the Section on Tumors and the Young Neurosurgeons Committee of the AANS/CNS, to be held on the evening of April 17 at the AANS Annual Meeting in Miami. Jacques Morcos MD, FAANS, FACS, Director of Skull Base and Endoscopic Surgery at the University of Miami, will be joining us as the honored guest. This joint reception has traditionally provided a social setting for connection and collaboration amongst members of the Tumor Section, Young Neurosurgeons Committee, and other neurosurgeons interested in the treatment of patients with tumors of the central nervous system. We look forward to seeing you there.

Tumor Section II:

The management of malignant brain tumors leads to challenges with regards to diagnosis, imaging and monitoring. Fortunately, blood/serum markers, genetic analysis, T-cell identification, and physiologic imaging have significantly improved our ability to treat these lesions. To highlight these techniques and their clinical implications, the Tumor Section will host a group of experts during the afternoon session on Wednesday, April 18, 2012, at the AANS Annual Scientific Meeting. The session is entitled, "Advances in Brain Tumor Diagnosis, Imaging, and Monitoring" organized and moderated by Dr. Ricardo Komotar and William Couldwell, MD, PhD, FAANS. The session will cover four topics: exosomes, circulating tumor cells, physiologic imaging and T-lymphocyte analysis. Bob Carter, MD, PhD, FAANS, will review the role of exosome-based biomarker analysis in gliomas. Then, we welcome Brian Nahed, MD, from The Massachusetts General Hospital, who will present his work with circulating tumor cells and CTC-chips. Dr. Donald O'Rourke, MD, FAANS, will report on the prediction of tumor subtype and grade using physiologic imaging. Finally, we look forward to Andrew Parsa, MD, PhD, FAANS, who will describe his work with T-lymphocyte prediction of progression versus pseudoprogression in gliomas. Considering the rapid advancements being made in the field of neurooncology, this symposium should provide a needed update on the status of these cutting-edge techniques and technology.

2011 AANS/CNS Section on Tumors Satellite Symposium Report

Michael Vogelbaum, MD, PhD, FAANS

The 2011 AANS/CNS Section on Tumors (SOT) Satellite Symposium was held in conjunction with the 2011 Society for NeuroOncology (SNO) Annual Meeting. The joint meeting, held in Anaheim, Calif. from Nov. 17-20, 2011, was organized by a Scientific Program Committee that included members of the SOT, and which was co-Chaired by Michael Vogelbaum MD, PhD, FAANS. In addition, Jason Sheehan, MD, PhD, FAANS was a co-Chair of the Education Day program. Andrew Parsa, MD, PhD, FAANS, worked with our vendors to create special opportunities for hands-on demonstrations, and Susan Chang, MD, developed and led a Special Course on Clinical Trials for Young Investigators, which was one of the most highly attended sessions on Education Day.

Overall, the meeting was felt to be a complete success. Total attendance for the meeting (SNO and SOT members) was 1,400, which was a new record for SNO. SOT Chair Fred Lang Jr., MD, FAANS, also serving as the President of SNO, gave an inspirational and memorable President's address. Finally, the meeting was a financial success for the SOT and resulted in a substantial net profit. In summary, the success of this meeting follows on the success of the previous joint meeting in 2009, and it supports additional opportunities for future collaboration.

Update on the AANS/CNS Joint Tumor Section Website

Jason Heth, MD, FAANS

The American Association of Neurological Surgeons (AANS)/Congress of Neurological Surgeons (CNS) Section on Tumors is a diverse group of neurosurgeons at all levels of training who are working to treat brain tumors in a broad number of ways. The mission of the Tumor Section includes providing a forum for brain tumor education and research, and to coordinate activities amongst the neurosurgical brain tumor community. The Tumor Section website, www.TumorSection.org, aims to assist in those goals.

TumorSection.org offers information, important links and directions for brain-tumor neurosurgeons, both Section members and non-members. Those interested can apply for membership through the website. The core of the application process is handled by the AANS, but the site does have useful directions and links to assist in membership application. While only members receive this newsletter, you can help interested nonmembers by directing them to the TumorSection.org site. The site also highlights upcoming meetings. For the CNS and AANS meetings, highlights of the upcoming brain-tumor-related sessions and lectures are previewed in the newsletter. Links are available for early registration and meeting programs. Other meetings also are highlighted on the website for additional opportunities in neuro-oncology.

The section website also showcases educational opportunities.

The fellowship section contains fellowship training opportunities in brain tumor research and clinical training. The awards section notes the awards given at the Annual Meetings. Award background information, application, links and deadlines are included. Past awards winners for each award also can be viewed.

The site also contains the section leadership, committees and respective chairs. This provides members further information about how to contact the leadership and find ways to be involved in the Tumor Section. The site also has information for international members, including international chairs for many countries. Prior newsletters also can be viewed and downloaded.

TumorSection.org can be another vehicle for you as a brain tumor neurosurgeon or researcher. If you are coordinating a meeting and would like to gain further exposure to this group, please contact me to have your meeting posted on the tumorsection.org homepage. Similarly fellowship opportunities can be highlighted on the site. If you are an international surgeon or researcher in a country without representation on the International Committee, you can find out how to volunteer on the site. TumorSection.org has a large amount of useful content. Feel free to contact me at jheth@umich.edu with any suggestions for additional offerings to be hosted on the site.

ACTION: The Alliance for Clinical Trials in Oncology

Ian F. Parney, MD, PhD

The spring meeting of the Alliance for Clinical Trials in Oncology (ACTION or the Alliance; www.alliance-website.org) was held March 15–17, 2012, in Chicago. The Alliance represents an amalgamation of three separate cancer cooperative groups (Cancer and Leukemia Group B; the North Central Cancer Treatment Groups; and the American College of Surgeons Oncology Groups). The Neuro-Oncology Committee meeting on March 17, chaired by Eva Galanis, MD, featured excellent multidisciplinary participation including contributions from several Tumor Section members.

Highlights relevant to the Tumor Section include the multi-center opening of N107c ([A Phase III Trial of Post-Surgical Stereotactic Radiosurgery Compared with Whole Brain Radiotherapy for Resected Metastatic Brain Disease](#)). This study for patients with up to four metastases (one of which has been resected) compares whole brain radiation to radiosurgery to the surgical cavity. All unresected metastases will be treated with radiosurgery. In addition, Tumor Section member Dr. Andrew Parsa's (MD, PhD, FAANS) trial "[A Phase 2 multicenter randomized, double blind, placebo-controlled trial comparing efficacy of heat shock protein-peptide complex-96 \(HSPPC-96\) vaccine or placebo in combination with bevacizumab \(Avastin®\)](#)

[in the therapy of Recurrent Glioblastoma Multiforme \(GBM\)](#)" has been presented to the Cancer Therapy Evaluation Program (CTEP) at NCI. This neurosurgically-driven study is the first clinical trial of any sort to be taken forward by the new Neuro-Oncology Committee. This reflects both the strong science leading up to the study and the strong commitment of the Neuro-Oncology Committee to neurosurgical clinical trials. Finally, the Tumor Section members present at the meeting held a discussion about how to facilitate neuro-oncology clinical trial development by neurosurgeons. To that end, draft clinical trial protocols will be solicited from Section members at regular intervals throughout the year for multidisciplinary review and feedback. This effort, to be headed by Manish Aghi, MD, FAANS, will be discussed further at the up-coming Section meeting at the AANS Annual Scientific Meeting in Miami.

Neurosurgical investigators from institutions that are members of the Alliance (or prior members of CALGB, NCCTG or ACOSOG) should contact Fred Barker, MD, FAANS, FACS, (e-mail: barker@helix.mgh.harvard.edu) or Ian F. Parney MD, PhD, (e-mail: parney.ian@mayo.edu) to discuss possible opportunities for neurosurgeons in this newly formed trials group.

Academic Community Alliance (ACA) Initiative

Aaron Cohen-Gadol, MD, FAANS; and Brian Ragel, MD, FAANS

The Academic Community Alliance (ACA) tumor committee is charged with improving patient care by creating a dialogue between the community and academic neurosurgical oncologists. This two-way conversation is meant to provide up-to-date treatment information and surgical opinions on difficult cases.

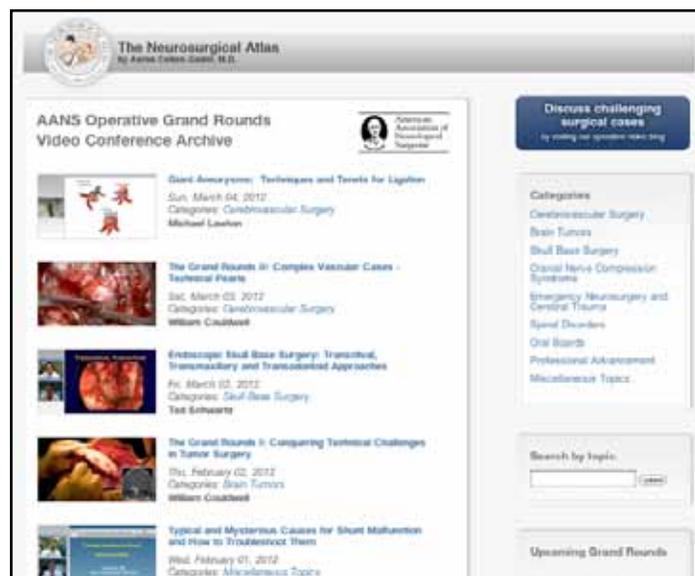
Under the direction of the American Association of Neurological Surgeons (AANS) and Dr. Cohen-Gadol, the ACA is leveraging the power of the Internet so neurosurgeons can solicit guidance and give advice on challenging tumor cases. By visiting <http://www.neurosurgicalatlas.com/index.php/aans>, users can submit difficult cases for opinion. This neurosurgery-specific education website offers an open blog on which neurosurgeons can comment (see Figures 1 and 2). Time permitting, cases are reviewed by experts in the field, but also are vetted via blog comments left by those in the neurosurgical community.

Ultimately, the ACA tumor committee wishes to open a dialogue among neurosurgeons for the benefit of our patients.

Figure 1. Screen capture of “The AANS Operative Grand Rounds” webpage showing archived educational video content on the left and the “Discuss challenging surgical cases” link on the right. Users can submit challenging cases for review by both experts in the field and the greater neurosurgical committee at-large

by logging on to <http://www.neurosurgicalatlas.com/index.php/aans>. The right upper link will connect to the webpage housing the surgical cases, each having its own blog function. (Figure 2.)

Figure 1:

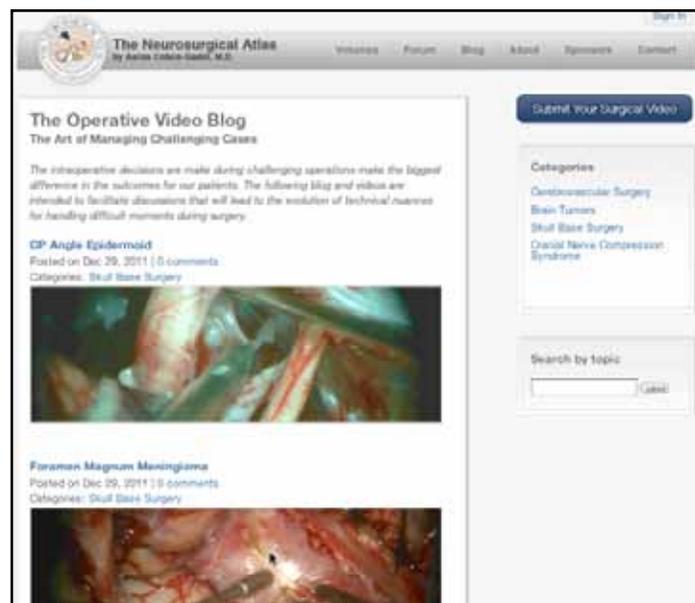


ABTA Clinical Research Grant

Howard Weiner, MD, FAANS, FACS, FAAP

The American Brain Tumor Association (ABTA) Clinical Research Grant was initiated in 2007, and is designed to provide support to early-stage clinical research projects in hope of developing successful projects that would go on to full-scale funding from the National Institutes of Health, American Cancer Society and other major funding sources. The grant initially was approved as a one-year grant with \$50,000 dedicated in support. In 2008, the first grant was awarded to John Sampson, MD, PhD, FAANS, of Duke University for his project entitled, “A Pilot Study of in vivo PET Imaging of Gene Expression and Tumor Localization of RNA-modified T cells in Patients with Glioblastoma.” Due to this initial success, the grant was extended to a two-year \$100,000 grant. In 2009, Andrew Parsa, MD, PhD, FAANS, of the University of California, San Francisco was awarded the grant for his project entitled, “HSP Immunotherapy for Recurrent Glioma Patients: PI(3) Kinase Activation Predicts Poor Clinical Outcomes.” The goal of this grant was to identify if PI(3) kinase activation correlates with poor response to brain tumor immunotherapy using the heat shock protein immunotherapy model. The 2011 two-year ABTA Clinical Research Grant was awarded this past spring to Linda Liau, MD, PhD, FAANS, of the University of California, Los Angeles. The next two-year cycle of grant applications will have an anticipated due date of January, 2013.

Figure 2:



International Committee Reports

Argentina

Alejandra T. Rabadán, MD, PhD

The first International Meeting of Neuro-oncology was held in Buenos Aires, Argentina, on October 14-15, 2011. It was organized by the Section of Neuro-oncology of the Argentine Society of Cancerology (AMA) and the Section of Oncological Neurosurgery of the Latin American Federation of Neurosurgical Societies (FLANC).

The honored guest speakers were members of the American Association of Neurological Surgeons (AANS)/Congress of Neurological Surgeons (CNS) Section on Tumors: Susan Chang, MD; Jeffrey Bruce, MD, FAANS, FACS; and Isabelle Germano, MD, FAANS, FACS. Jose Valerio-Pascua, MD, was invited as a representative of Young Neurosurgeons of the FLANC. Other speakers came from different countries of Latin America (Chile, Uruguay, Brazil, Peru, Colombia, El Salvador and Honduras).

The event had the academic support of the University of Buenos Aires Faculty of Medicine UBA, the Cancer National Institute (INC), Argentina Society of Neurosurgery (AANC), the Argentine Society of Neurology, the Argentine Palliative Care Society, the Argentine Society of Gerontology and the Argentine Medical Association. We also had the academic support of the Embassy of the United States of America in Buenos Aires.

The generous economic contribution of the AANS/CNS Section on Tumors, as well as the contribution of the Argentine Society of Cancerology, allowed us to have had this interdisciplinary meeting.

There were 217 attendees, an equal mix of neurosurgeons and neuro-oncologists. The number of attendees was more than expected. They exchanged information and the discussions were promoted in a friendly atmosphere.

It is our goal that this kind of meeting would be organized every four years in our country to promote the professional relationship and reinforce ties with the members of the AANS Section of Tumors.

Scotland

Sam Eljamel, MBBCh, MD, FRCSEd, FRCSIr, FRCS(SN)

The Scottish Adult Neuro-Oncology Network (SANON) had its annual meeting in Edinburgh, with emphasis on collecting and registering all patients presenting with brain tumors in Scotland. The audit data so far demonstrated that patients are discussed at the five neuro-oncology MDT across the country and little difference in outcomes and processes.

The Sixth Dundee Fluorescence Image Guided Glioma Surgery (FIGS) using ALA (Gliolan) on March 12, 2012. Hands-on FIGS courses are mandatory in the European Union before surgeons are allowed to use Gliolan (ALA) in glioma resection.

The Society of British Neurological Surgeons (SBNS) spring meeting will be hosted in Aberdeen Scotland, April 18-19, 2012.

The British Neurosurgical Research Group (BNRG) met in Darlington, Co Durham March 8-9, 2012, where one of the sessions was dedicated to basic brain tumour research. The

International Head Injury Association meeting also recently took place in Edinburgh, Scotland, from March 21-24, 2012.

Turkey

Uğur Türe, MD

The Turkish Neurosurgical Society proudly announces that Istanbul, the city where three continents meet, will host "XVI. WFNS World Congress of Neurosurgery, 2017." Our Society is motivated and willing to prepare a congress worthy for American Association of Neurological Surgeons (AANS)/Congress of Neurological Surgeons (CNS) Tumor Section Members' attention.

The Turkish Neurosurgical Society Neuro-oncology Section held its 4th annual meeting — "What's New in Neuro-oncology 2012" — in December 2011. The meeting was well-attended, and new articles in the literature were discussed. In this meeting, Neuro-oncology Section members voted in favor of preparing new national guidelines in treatment of primary brain tumors, brain metastasis and rare intracranial tumors.

The Neuro-oncology Section also initiated a discussion on building "Public Neuro-oncology Centers" that are equipped with the latest technology and incorporate leading neurosurgeons in this field to treat rare intracranial tumors as well as CNS tumors.

A second Istanbul Microneurosurgery Course, a combination of hands-on fiber dissection and live-surgery, was held in Istanbul Dec. 5-9, 2011. Interest to the course was satisfying with the contribution of Professor M. Gazi Yaşargil as the honorary guest.

Another important course, "International Basic Neurosurgery Course," was initiated by Turkish Neurosurgical Society March 14-17, 2012, in Antalya, Turkey. To promote education of neurosurgical residents and young neurosurgeons, we provided scholarships for 60 participants from developing countries.

The upcoming international meetings and courses in Turkey are:

- June 25-30, 2012, "3rd Istanbul Microneurosurgery Course," Istanbul
- September 2-5, 2012, 9th Asian Congress of Neurological Surgeons, Istanbul

Australia

Charlie Teo, MBBS, FRACS

The field of neuro-oncology continues to attract more interest and funding from the general population. The Cure for Life Foundation has funded a fellowship for world-class researchers to spend six months at the Cure for Life Foundation laboratory at the Lowy Cancer Centre. The first fellow is none other than the highly distinguished scientist, Prof. Paul Kleihuis. The Aesculap Fellow in Neuro-oncology and Minimally Invasive Neurosurgery is David Wilson, MD, from the Barrow Neurological Institute.

The James Crofts Foundation hosted a Brain Tumour Expo in October 2011 that was well-attended and had speakers from a range of medical professional groups involved in the care of patients with brain tumours, both adults and children. The coordinator of

the Australian Genomics and Outcomes of High Grade Glioma (AGOG) project is housed in Western Australia and continues to work collaboratively with investigators in New South Wales (NSW) to build a biobank of tumour specimens, serum and germline DNA, with comprehensive clinical data. They now have more than 750 patients consented to the AGOG project and are currently submitting funding applications for a number of projects that will use this resource (www.agog.org.au). In 2011, the AGOG study coordinator organised a Walk Around the World for Brain Tumours event in beautiful Kings Park, an event which they hope will be larger in 2012. Western Australia (WA) continues to be active in clinical brain tumour research. The main Perth neuro-oncology site, Sir Charles Gairdner Hospital, continues to recruit to the EORTC Elderly glioma study, is participating in the CATNON trial, and has had the COGNO CABARET study open, although this is closing shortly. This site also will be participating in an upcoming sponsored study of a TGFbeta inhibitor as second line treatment for glioblastoma. In local WA research, a quantitative study of patient and carer needs is to conclude shortly, and has led to a funding application for a multi-faceted intervention specifically for carers of patients with brain tumours.

In Queensland over the last year, researchers continue to investigate the role of cytomegalovirus (CMV) in malignant glioma. More than 50 patients have been tested serologically with detailed analysis of T cell form and function. Many of these patients' tumours have also been tested immunohistochemically. Six patients have now been enrolled in a phase I study for recurrent glioblastoma of adoptive T cell therapy directed at CMV antigens. Early results have been submitted for publication. Other research in the sunny state continues into the neuropsychological and social impacts of the diagnosis of a brain tumour.

In NSW, recruitment to the Australian-based phase II trial, CABARET is close to completion, eight months ahead of schedule. This trial is investigating the efficacy of bevacizumab as a monotherapy for GBM patients with relapsed tumour compared to bevacizumab plus carboplatin. ExCENTRIC is still open for patients with relapsed GBM who are MGMT unmethylated. The ExCENTRIC protocol sees the addition of cilengitide to standard radiotherapy and temozolomide with the addition of procarbazine. The other trial recruiting well in NSW is the CATNON (EORTC 26053-22054) Phase III trial, which is testing the efficacy of concurrent and adjuvant temozolomide for anaplastic glioma without loss of heterozygosity of the chromosome arms, 1p and 19q. Researchers at the Cure For Life Neuro-oncology Group, Lowy Cancer Research Centre have shown strong efficacy of an arsenical compound called PENAO. The preclinical research has shown strong anti-glycolytic and pro-apoptotic effects of the PENAO drug when administered to GBM. A phase I trial testing the effects of PENAO is due to open in Melbourne in March 2012. The majority of NSW clinical sites are collecting biospecimens for storage into AGOG and research projects using this material have commenced with the first one validating biomarkers predictive of response to concurrent therapy. In other centres, scientists are studying the biochemical role of the essential amino acid Tryptophan metabolism through the kynurenine pathway in the glioblastoma persistence. As part of an international

research team from Germany, U.S., Switzerland and Australia, A/ Prof Gilles Guillemin, who is head of the Neuroinflammation Group in UNSW, and his team have identified the key role played by kynurenine, a by-product of tryptophan metabolism, in favouring brain tumour growth and at the same time suppressing anti-tumour immune response. The researchers were also able to identify the receptor expressed by tumour cells that kynurenine acts through — the aryl hydrocarbon receptor. Specific inhibitors able to block enzymes leading to kynurenine production have already been developed for other diseases and such a drug could potentially be available for clinical trials for patients with cancer within a few years.

Japan

Fumio Yamaguchi, MD, PhD, FJCNS

Getting Back to Normal from the Great East Japan Earthquake

March 11, 2012, marked one year since the devastating earthquake and tsunami in east Japan, which resulted in approximately 20,000 deaths. Last year, several scientific meetings were cancelled because of this historic catastrophe. This year, most medical meetings (including neurosurgical meetings) have been held or are scheduled as usual, except in the area suffering Fukushima nuclear power plant accidents. Japan is grateful for the heartwarming support from foreign countries, including the United States. With continuous support, resumption of neurosurgical activities in those areas is in progress.

Practice fee revision 2012

Surgery fees will be revised from April. In neurosurgical operations, the fee for resection of brain tumor is raised to 1,321,300 yen from 928,600 yen, and the fee for endoscopic transsphenoidal surgery has risen to 1,084,700 yen from 837,000 yen. These revisions are quite large following the revision of last year. This revision is one of the counter-plans against the decreasing number of surgeons in Japan.

The medical cost per one person in Japan, \$2,581, is still much lower than the U.S. cost of \$7,290. The increases in surgery fees are welcome for hospitals; however, it will not affect the wage for neurosurgeons working in hospitals.

Future meetings for neurosurgery and neuro-oncology in Japan include the following:

- 21st Conference on Neurosurgical Techniques and Tools (CNTT)
March 30-31, 2012, Osaka, Japan - <http://cntt2012.umin.ne.jp>
- 32nd Annual meeting of the Japan Congress of Neurological Surgeons
May 11-13, 2012, Yokohama, Japan - <http://jcns2012.umin.jp/>
- 17th Annual Meeting of the Japanese Congress for Brain Tumor Surgery
Sept. 7-8, 2009, Yokohama, Japan - <http://bts2012.umin.jp>
- 13th Annual Meeting of the Japan Society of Molecular Neurosurgery
Sep. 20-21, 2011, Kumamoto - Japan <http://jsmn.umin.jp>
- 71st Annual Meeting of the Japan Neurosurgical Society

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- Oct. 17-19, 2012, Osaka, Japan - <http://www.jns2012.jp/>
- 30th Annual Meeting of the Japan Society for Neuro-Oncology
Nov. 25-27, 2012, Hiroshima, Japan

Switzerland

Dominik Cordier, MD

Tumor-related developments:

Ongoing development and further specialization within the different fields of neurosurgery triggered the discussion within the Swiss Society of Neurosurgery (SSN) about the introduction of further sub-specialties within the field. So far, there is no definite answer to the question on how to introduce such a system. A possible scenario could be the introduction of a subspecialty in tumor-neurosurgery, vascular neurosurgery and spinal neurosurgery.

The establishment of the previously mentioned brain tumor bank (Tumor News of 2011) allows the study of a large number of glioma samples concerning potentially drugable pathways. The molecular analysis of selected phosphoproteomic activation patterns in malignant gliomas versus control tumors and normal brain tissue is performed by the group of G. Hutter and L. Mariani (University Hospital Basel). In contrast to earlier studies, their data reflect the current activation status of selected drugable pathways in tumor tissue. Reverse-phase protein arrays have been shown to represent a fast and reliable tool to supplement morphologic diagnosis with pathway-specific information in each individual tumor.

National meetings:

- May 11, 2012:
4th Swiss Neurooncology Meeting
Kantonsspital Aarau, Switzerland
- June 7-8, 2012:
Joint annual meeting
Swiss Society of Neurosurgery (SSN)/Society of British Neurological Surgeons
Palazzo dei Congressi, Lugano, Switzerland

China

Yonggang Wang, MD, PhD

The Chinese Neurosurgical Society's annual meeting was held Oct. 13-15, 2011, in the city of Tianjin. More than 2,000 neurosurgeons from all over China attended this meeting. Many international neurosurgical experts from the United States, Germany, Canada, Korea and Japan also were invited to give wonderful lectures.

A serial symposium, named "The Top of USA Meet the Top of China," was held in Beijing, Xi'an and Shanghai respectively from March 6-10. Professor Henry Brem and his colleagues from Johns-Hopkins Hospital came to China and communicated with top of neurosurgeons in these three regions. Neurosurgeons from bilateral sides gave lectures.

Right now, a summit forum about GBM and CSNO-SNO Joint Meeting is opening in Shanghai. Five SNO committees were invited to introduce the advance and hot topics about the treatment of malignant glioma. They also will give the presentations in Nanjing, Chengdu and Beijing in the following days in this week.

Forthcoming meetings in China include the following:

- 7th Chinese Congress of Neurological Surgeons annual meeting
May 26-27, 2012 Nanning, China - <http://www.ccnsnet.org/?action-viewnews-itemid-804>
- Symposium for Chinese neuroscientists worldwide 2012
June 25-30, 2012, Xi'an, China - <http://www.csn.org.cn/2012/reg.asp>
- 2nd international neural regeneration symposium
September 20-25, 2012 Shenyang, China - <http://www.nrronline.org/sites/meeting/>
- 11th Chinese neurosurgical society annual meeting
October 10-14, 2012, Hangzhou, China - <http://www.cnsmeeting.com/2012/cn/>
- 11th AOSBS Asian-Oceanian International Congress on Skull Base Surgery
October 27-28, 2012, Beijing, China - <http://www.aosbs2012.org/en/>

England

Nitin Mukerji, MSc, MD, FRCSEd (Neuro.Surg)

Activities in the spring quarter have just got underway. The British Neurosurgery Research Group (BNRG) met at Redworth Hall, County Durham on March 8-9, 2012. This small group generally is the forum where all new research is generally presented and new ideas are floated. This time the progress of all the major trials currently running in the UK were discussed. These included the STICH II and Trauma STICH trials as well as the RESCUEICP trials. The recruitment to RESCUEICP in the wake of the negative results of the DECRA trial was discussed in detail. Increased involvement from North American centers was suggested as a possible means of boosting recruitment. There were interesting talks on the use of Decorin in glioblastomas and multimodality imaging to assess microvasculature and angiogenesis in malignant brain tumors. The upcoming meetings in the UK are:

- March 21-25, 2012 – Ninth World Congress of The International Brain Injury Association - Edinburgh
- May 4, 2012 – UKNG/SBNS/Neurovascular Specialist Course - London
- May 16-18, 2012 – 6th International Congress of the World Federation of Skull Base Societies and the 10th European Skull Base Society Congress - Brighton
- June 27-29, 2012 – BNOS 2012 Challenges and Controversies - Manchester
- Sept. 26-28, 2012 – SBNS Autumn Meeting - Leeds

Section on Tumors Leads Guideline Development

Steven N. Kalkanis MD, FAANS

The Tumor Section Guidelines Committee continues to serve as one of the most integral and active delegations to the AANS/CNS Joint Guidelines Committee (JGC), spearheading two new guidelines efforts this year: the *metastatic spine guidelines* and the *progressive/recurrent glioblastoma* guidelines. The *brain metastases clinical practice guidelines* chapters, published in the *Journal of Neuro-oncology* in 2010, continue to receive significant worldwide citations and this year have been retro-actively formally endorsed by the American Society for Radiation Oncology (ASTRO).

This year of 2012 also marks the first year of the new comprehensive national guidelines initiative sponsored by the Congress of Neurological Surgeons, whereby the CNS has created an internal infrastructure for scientific medical evidence guidelines development, including the hiring of high-level expert professional staff, with an initial annual investment of \$250,000. We welcome Ms. Koryn Rubin and Ms. Laura Raymond to our guidelines team, and we also congratulate Mark Linskey, MD, FAANS, for his productive tenure as Chair of the national Joint Guidelines Committee. Timothy Ryken, MD, MS, FAANS, FACS, has succeeded Dr. Linskey as the new JGC chair, and Dr. Kalkanis; Sepideh Amin-Hanjani, MD, FAANS; and Kevin Cockroft, MD, FAANS, FACS, are the new national co-vice chairs of the JGC. Our upcoming Tumor Section projects have already been presented

to, and prioritized by, the incoming JGC leadership, and thus we look forward to a fast-tracked set of new publications in both spine metastases and progressive/recurrent GBM within this coming year.

Jeff Olson, MD, FAANS, is leading the multidisciplinary effort on the recurrent GBM guidelines project. The guidelines for the treatment of GBM at initial presentation was completed and published, and also led by Dr. Olson, in 2008 and will soon be updated. In the meantime, this new initiative focuses on the difficult questions asked in tumor boards across the country: how best to treat GBM at recurrence? In managing recurrent or progressive malignant glioma, guidelines chapters are in the final stages of development and address the following topics: Outcome assessment and Neurocognition; Role of Neuroimaging (progression vs. radiation change); Role of Biopsy; Role of Cytoreductive Surgery; Role of Radiotherapy Techniques (re-irradiation, stereotactic radiosurgery, brachytherapy); Role of Chemotherapy; and Future Innovations.

Dr. Timothy Ryken is spearheading the metastatic spine disease guidelines, and chapters include: radiographic assessment, medical management, indications for surgery, radiotherapy and combination treatments, implantable devices including pain pumps, vertebral augmentation (kypho/vertebroplasty), pre-operative embolization, and pathology-specific recommendations. This guidelines project has proven to be an excellent opportunity for collaborating with other sections as well (Spine and Tumor Sections), and final drafts are being reviewed this month.

We welcome all participants, and anyone interested in pursuing any of these guidelines topics — or new projects — is strongly encouraged to contact me at skalkan1@hfh.org.

Skull Base Surgery

Nicholas Levine, MD

The North American Skull Base Society (NASBS) meeting was held in Las Vegas, Nev., Feb. 17-19, 2012. A pre-meeting practical dissection course was held Feb. 15-16. A total of 388 individuals attended the “Managing Risk at the Skull Base” meeting. Forty-nine new members joined the NASBS at the meeting.

The NASBS membership by specialty includes 171 head and neck surgeons (50 percent), 147 neurosurgeons (43 percent), eight plastic surgeons (2 percent), six radiologists (1.7 percent), four oral surgeons (1 percent), four radiation oncologists (1 percent), two ophthalmologists (0.6 percent), one pathologist (0.3 percent), and one anatomist (0.3 percent).

The summer Senior Neurosurgical Residents and Head and Neck Fellows Practical Dissection Workshop will be held again this year. The next NASBS meeting will be held at the Doral Golf Resort and Spa in Miami, Feb. 15-17, 2013. The meeting theme will be “The Complexity of Measuring True Quality.” A pre-meeting practical dissection course will be offered Feb. 13-14.

Young Neurosurgeons Committee

Brain Nahed, MD

The Young Neurosurgeon Tumor Section Reception will be held during the AANS conference in Miami on April 17, 2012, from 5:30-7:30 p.m. (location TBA). Jacques Morcos, MD, FAANS, FACS, Professor of Neurosurgery at the University of Miami, will be this year’s honored speaker at the event. The reception has been hosted for the past several years by the Young Neurosurgeons and Tumor Section committees. In addition, this year, we have extended an invitation to all international members to attend in what promises to be our biggest reception yet. We welcome all students, residents and attendings to join us at the reception.

Brainlab International Research Fellowship

William Curry Jr., MD, FAANS

This January, the Tumor Section awarded the 2012/2013 Brainlab International Research Fellowship to Taj Sharar, MD, a neurosurgeon and Israeli citizen who recently completed residency at Tel Aviv Medical Center. His proposal, "Mesenchymal Stem Cells as Natural Factories for Nanosized Exosomes Carrying Micro-RNAs," received very high scores from a committee composed of members of the American Association of Neurological Surgeons (AANS)/Congress of Neurological Surgeons (CNS) Executive Committee and was thought universally to be very promising. Dr. Sharar will be pursuing this project at the MD Anderson Cancer Center with the mentoring of Frederick Lang, MD, FAANS.

The 2011/2012 Brainlab International Research Fellow, Alexandros Bouras, MD, (Radiosensitivity Enhancement and Therapeutic Targeting of Glioblastoma Stem Cells by EGFRvIII

Antibody Conjugate Iron Oxide Nanoparticles, Emory University) will present his work at the 2012 Annual Meeting of the CNS.

The Brainlab International Research Fellowship annually awards \$50,000 in travel and salary support to a neurosurgeon from beyond the United States or Canada who wishes to enrich his or her research experience in basic, translational or clinical research in neuro-oncology. Applications for the 2013/2014 fellowship will be released in the Fall of 2012, with an expected deadline in mid-November. Also, individuals and institutions interested in serving as sponsors for prospective fellows may inquire by e-mail at tumorfellowship@aans.org. We thank Brainlab for its continued support in training researchers in neuro-oncology from all over the world.

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