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From the Chairman



Frederick F. Lang,
MD, FAANS, FACS

It is my honor and great pleasure to serve as the new chairman of the AANS/CNS Section on Tumors. I would like to congratulate my predecessor, Jeffrey N. Bruce, MD, FAANS, FACS, for his outstanding leadership as chairman over the past two years. Dr. Bruce led the section with aplomb, advancing new initiatives in research, promoting international interactions, organizing outstanding programs at our annual meetings, supporting the development of guidelines and adroitly steering the section to its current stature as a model section of the AANS and CNS.

One of the first responsibilities of a new chairman of the AANS/CNS Section on Tumors is to select members and leaders of the various subcommittees that comprise the Tumor Section Executive Committee. The new chairs of each of the section subcommittees can be found on the Tumor Section Website (www.tumorsection.org). I would like to thank all of the past Executive Committee members for their contributions during Dr. Bruce's tenure and all of the new Executive Committee members who have agreed to work for the section during my tenure. This talented group of neurosurgeons will help guide and shape the section's agenda for the next two years. I encourage the membership of the AANS/CNS Section on Tumors to become familiar with the Executive Committee, to offer suggestions to the Executive Committee and to volunteer for service on the subcommittees. Given that

this newsletter is one of the most important forms of communication between the Executive Committee and the members of the section, I would like to take this opportunity to thank Manish K. Aghi, MD, FAANS, for editing this newsletter since 2009 and to extend my appreciation to Jonas M. Sheehan, MD, FAANS, FACS, for accepting the editorship for the next two years.

From my perspective, one of the most important functions of the AANS/CNS Section on Tumors is to provide outstanding educational opportunities to the members. In this regard, in 2009, we experimented with combining our "Biennial Satellite Symposium" with the annual meeting of the Society for Neuro-Oncology (SNO). This proved to be successful, and so this year we again have joined our Biennial Symposium with the SNO Annual Meeting. This joint meeting, which will take place in Anaheim, CA, November 17-20, 2011, will allow neurosurgeons from the AANS/CNS Section on Tumors to showcase their basic and clinical research to a diverse audience of neuro-oncologists, radiation oncologists, neuroradiologists, neuropathologists, neuropsychologists and basic scientists. It will also enhance our education in areas beyond neurosurgery and thereby expand our membership's knowledge and potential influence on other neuro-oncological subspecialties. I thank Michael A. Vogelbaum, MD, PhD, FAANS, for his untiring effort as the Tumor Section Co-Chairman of the Scientific Program Committee. Along with Tim Cloughesy, MD, the SNO Co-Chairman, the scientific committee has organized

a world-class scientific program. The majority of the presentations are drawn from peer-reviewed abstract submissions; however, the Scientific Program Committee has arranged many “Sunrise Sessions” featuring speakers who are world-renowned experts in areas that should be of interest to neurosurgeons. Most notably, this meeting will include a one day workshop on clinical trials that will be of great educational value to all neurosurgeons interested in clinical research. I encourage everyone, particularly our junior members, to attend this workshop. In addition, Jason P. Sheehan, MD, PhD, FAANS, of the AANS/CNS Section on Tumors has helped organize the Education Day, which will focus on radiosurgery, with emphasis on spinal applications. Because of the joint nature of this meeting, neurosurgeons from the section will have the opportunity to discuss and debate the role of radiosurgery with our medical and radiation oncology colleagues. Lastly, we are indebted to Andrew Parsa, MD, PhD, FAANS, who has managed to make this meeting a financial success for the section and in so doing, has organized several company supported educational symposia that will interest neurosurgeons. I look forward to seeing all members of the section at this special meeting sponsored by both the AANS/CNS Section on Tumors and the Society for Neuro-Oncology.

Also in the area of educational meetings, I want to thank Daniel Cahill, MD, PhD, for arranging the Section on Tumors Symposium that will take place at the upcoming CNS Annual Meeting in Washington, DC, on October 4, 2011. This symposium entitled, “Genomic Alterations in Primary Brain Tumors: Clinical Report” will highlight recent advances in genomics, emphasizing the relevance of new molecular genetic classifications in clinical practice. It is clear that molecular genetics is becoming increasingly important in our clinical decision making, and this symposium will update practicing neurosurgeons on this rapidly changing field. The CNS Annual Meeting will also include many award-winning abstracts. In fact, because of the generosity of our many partners, including Brainlab, the American Brain Tumor Association (ABTA), Stryker, the Bittner Family, the Preuss Foundation, Integra, Synthes, Leksell, the Mahaley Foundation and the *Journal of Neuro-Oncology*. The AANS/CNS Section on Tumors presents over 10 awards for outstanding abstract submissions at the Annual Meetings of the AANS and CNS. Jonas M. Sheehan, MD, FAANS, FACS, deserves kudos for adeptly chairing the Awards Committee over the past two years, and I thank Andrew Parsa, MD, PhD, FAANS, for agreeing to take on this time-consuming task for the next two years.

One new initiative, started by Dr. Bruce, and which I would like to see further developed, is the implementation of clinical trials by the AANS/CNS Section on Tumors. To meet this goal, Dr. Bruce established the Clinical Trials Committee within our section. We are grateful to Mark E. Linskey, MD, FAANS, the initial chairman of this committee, who worked diligently over the past two years to lay the foundation for the section to undertake clinical trials. Because of their experience in clinical trial design and execution, I have now asked Manish K. Aghi, MD, FAANS (chair), John A. Boockvar, MD, FAANS, and Costas G. Hadjipanayis, MD, PhD,

FAANS, to take on this charge. Achieving such an ambitious goal will be difficult, but if successful, this committee could change the complexion of our section. I encourage the participation of all section members to develop and undertake clinical trials within the section.

Another new initiative in the section is the establishment of the so called “Matrix” Committee. Indeed, the AANS/CNS Section on Tumors was recently approached by members of the Society of Neurological Surgeons (SNS), who were responding to solicitations by the Resident Review Committee (RRC) and the Accreditation Council for Graduate Medical Education (ACGME), to provide recommendations related to the future curriculum for neurosurgery residents as it pertains to CNS tumors. The goal is to develop a standardized curriculum for neurosurgical residents, with specifically defined outcome measures. The end result will be a so-called “matrix” that will outline all the elements of this curriculum. Nino Chiocca, MD, FAANS, has agreed to chair this committee, which currently includes 10 Tumor Section members. This initiative will afford the section the opportunity to positively influence the education of future residents.

Also on the new agenda list is the goal of assisting the CNS and AANS with the development of the NeuroPoint Alliance project. To this end we have established the NeuroPoint Alliance Committee, which Mark E. Linskey, MD, FAANS, has graciously agreed to chair. The NeuroPoint Alliance was founded “to develop an Internet-based national data submission and management platform to address a growing need for broad-based prospective practice data collection at a national and individual practice level.” It is anticipated that the ABNS will use this platform for the collection of both MOC and candidate practice data. In addition, this database can be used for clinical research purposes. It is hoped that the AANS/CNS Section on Tumors can help shape the development and use of this database management system.

The AANS/CNS Section on Tumors remains committed to our international members, and like my predecessors, I have asked neurosurgeons from across the globe to participate in our Executive Committee as representatives of their respective countries. Randy Jensen, MD, PhD, FAANS, and Daniel Prevedello, MD, have agreed to chair the International Committee, which includes 18 international representatives from across the world. The names of these representatives can also be found on our website. Over the past few years, the section has supported meetings in Scotland, Mexico and Argentina, and we will look for other opportunities to assist our international colleagues. Section members will participate in the upcoming 14th European Congress of Neurosurgery in Rome, Italy, on October 9-14, 2011.

Lastly, the section remains devoted to promoting research opportunities. The section is indebted to Brainlab for funding the AANS/CNS Section on Tumors/Brainlab International Research Fellowship, which is now in its fifth year. In addition, the ABTA has supported a research award through the Tumor Section since 2007 and has been an important source of significant funding for many of our investigators. Members who are interested in these awards should contact William T. Curry, MD, FAANS (for International Research Award) or Howard L. Weiner, MD (for the ABTA Award). We are committed to maintaining partnerships with

these like-minded organizations to advance the research agenda within the section

Overall, the AANS/CNS Section on Tumors continues to be a dynamic organization of neurosurgeons dedicated to eradicating CNS tumors. I look forward to serving as your chairman for the next two years. I thank the section's newly elected Secretary/Treasurer, Frederick G. Barker II, MD, FAANS, FACS, for his assistance and all the members of the Advisory Board who have graciously agreed to help guide my tenure, including Gene H. Barnett, MD, MBA, FAANS, FACS; Mitchel S. Berger, MD, FAANS, FACS; Peter Black, MD, PhD, FAANS; Nino Chiocca, MD, FAANS; William T. Couldwell, MD, PhD, FAANS; Roberta P. Glick, MD, FAANS; James M. Markert, MD, FAANS; Joseph M. Piepmeier, MD, FAANS; Mark L. Rosenblum, MD, FAANS; James T. Rutka, MD, PhD, FAANS; Raymond Sawaya, MD, FAANS and Ronald E. Warnick, MD, FAANS. Finally, I thank the members for your participation in and support of the AANS/CNS Section on Tumors.

Enjoy the newsletter!

Frederick F. Lang, MD, FAANS, FACS

Brainlab International Research Fellowship

William T. Curry, MD, FAANS

The Brainlab International Research Fellowship is in its sixth year of funding and has been awarded five times over that period. This year's fellow, Alexadros Bouros, from Greece, is studying at Emory University under the sponsorship of Costas Hadjipanayis, MD, PhD, FAANS, and his project is entitled, "Radiosensitivity Enhancement and Therapeutic Targeting of Glioblastoma Stem Cells by EGFRvIII Antibody-Conjugated Iron Oxide Nanoparticles."

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 2012 Fellowship will be released later in the Fall and available at the AANS/CNS Section on Tumors Website (www.tumorsection.org), with an expected deadline in mid-November. Also, individuals and institutions interested in serving as sponsors for prospective fellows may inquire by email at: tumorfellowship@aans.org. The AANS/CNS Section on Tumors again thanks Brainlab for its valued support in training researchers in neuro-oncology from all over the world.

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

Susan M. Chang, MD

The Second Joint Meeting of the Society for Neuro-Oncology (SNO) and the AANS/CNS Section on Tumors (SOT) will be held in Anaheim November 17-20, 2011. Michael A. Vogelbaum, MD, PhD, FAANS, from the SOT and Tim Cloughesy, MD, from SNO are the scientific chairs for the meeting and have engaged many members of each of the organizations to develop an exciting program.

Co-Chairs Eric Chang, MD, Arjun Sahgal, MD, and Jason Sheehan, MD, PhD, FAANS, have selected, "Stereotactic Radiosurgery and Radiation Biology in the CNS" as the major theme of the educational day that will highlight topics of particular interest to the neurosurgical contingent. There are several sunrise sessions that focus on surgical neuro-oncology and include, "Surgery for Non-Malignant Skull Base Tumors" and "Intraoperative Surgical Adjuncts for Visualizing Tumor." Each organization will be able to retain 100% of the exhibit fees and support revenue that they secure for the meeting and Andrew Parsa, MD, PhD, FAANS, is leading the fundraising effort on behalf of SOT.

In addition, there will be a three hour educational workshop that will highlight the challenges of neuro-oncology trials with an emphasis on surgically based studies. Surgically based neuro-oncology clinical trials addresses issues of more extensive tumor resections, evaluation of targeted therapies, improved drug delivery, immunotherapy, gene therapy, stem cell therapy and brachytherapy. These studies have unique aspects in terms of trial design, conduct and evaluation. Members of the SOT and SNO who have served as a principal investigator of clinical trials will review trial endpoints, response assessments, evaluation of treatment toxicities as well as statistical considerations. Regulatory requirements for applications to the Federal Drug Administration and Institutional Review Boards will also be reviewed. The goal of this workshop is to engage young investigators in academic or community settings, and to provide a forum for discussion of these important aspects of clinical research.

Clinical Trials

Mark E. Linskey, MD, FAANS

In the Fall of 2010, the Clinical Trials Committee (CTC) of the AANS/CNS Section on Tumors (SOT) performed a survey of all Executive Committee (EC) members to gauge their interest in brain tumor clinical trials (CT) as well as their thoughts regarding the form of CT support and participation that should be fostered by the SOT. The survey was designed using Survey Monkey™ software with the support of Darlene A. Lobel, MD. The survey consisted of 12 closed-ended questions and one, idea-generating, open-ended, question. The survey went out on October 25, 2010, and responses were left open for a full week (through October 29, 2010). The survey was designed to address the ECs vision for participation in brain tumor CTs, the personal and institutional experience of EC members in CTs, the level of interest in SOT EC members participating in CTs, as well as EC member ideas regarding SOT CTs. Overall, 23 of 72 EC members (32%) responded to the survey. This included 15 of 37 officers and committee chairs and representatives (40.5%), with lower response rates from international liaisons (10%) and senior advisors (20%).

An overwhelming 98.3% of respondents felt that the SOT should be involved in brain tumor CTs. Of these, 65.2% would support the SOT contracting with a certified clinical research organization (CRO) to perform these CTs, 56.5% of respondents

would support the SOT teaming up with industry sponsors to perform these CTs and 47.8% felt the SOT should partner with a specific CRO (Radiation Therapy Oncology Group - RTOG) to enroll patients in jointly sponsored brain tumor CTs. Overall, 78.2% of respondents indicated they are interested in participating in the SOT CTC and 73.9% of respondents indicated they would enroll patients in SOT sponsored brain tumor CTs. The response that gives us some pause was the indication that while 56.5% of respondents would enroll patients into SOT CTs with the SOT receiving credit for patient enrollment, 39.1% of respondents would prefer credit for patient enrollment remain with their parent institution rather than the SOT.

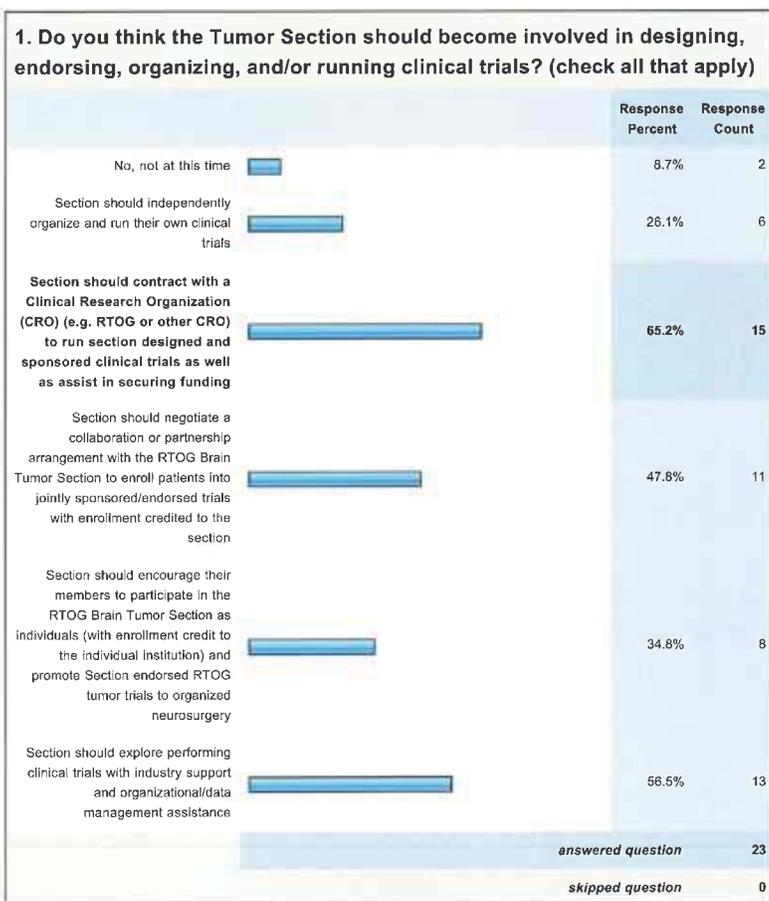
In regards to existing infrastructure and experience, 43.5% of EC respondents indicated absence of a cancer center data management office with data management services only present within the department, the hospital or the university (4.3% had no data management support whatsoever). Only 59.1% of respondents were working at an institution with a National Cancer Institute (NCI) designated comprehensive cancer center and only an additional 9.1% of respondents were working at an American College of Surgeons (ACS) designated cancer center (68.2% combined). While 90.9% of respondents had been either

principle investigator (PI) or Co-PI on a brain tumor CT institutional review board (IRB) submission, 63.6% had served as a PI or Co-PI on a university brain tumor CT grant submission and 54.5% had served as a PI or Co-PI on a university brain tumor CT grant submission, only 22.7-27.3% of respondents had participated as a PI or Co-PI on a NIH RO1, R21 or Program Project grant submission. Overall, 84.2% of respondents were working at centers that were members of RTOG. The next most frequent memberships were American Brain Tumor Consortium (ABTC) at 36.8%, ACS Oncology Group (ACSOG) at 26.3%, Southwestern Oncology Group (SWOG) at 26.3% and the North Central Cancer Treatment Group (NCCTG) at 21.1%.

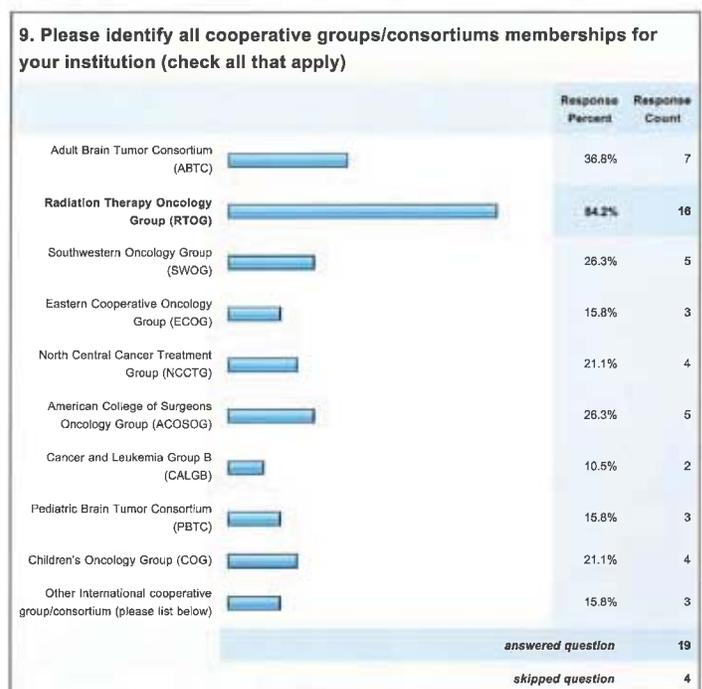
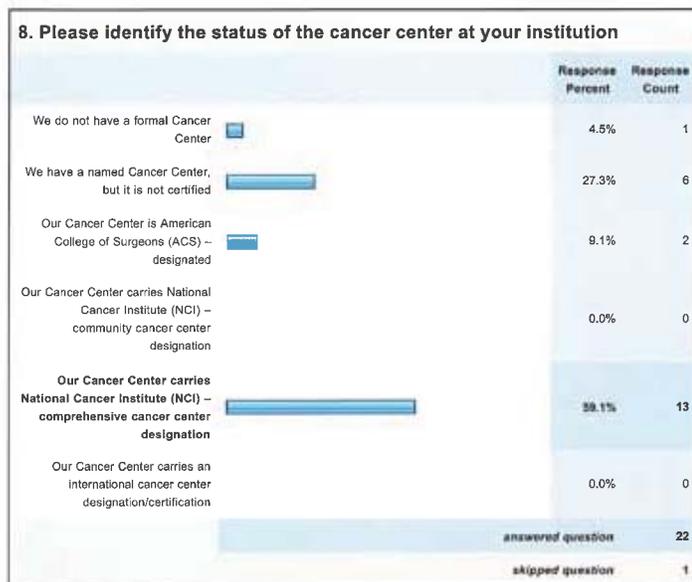
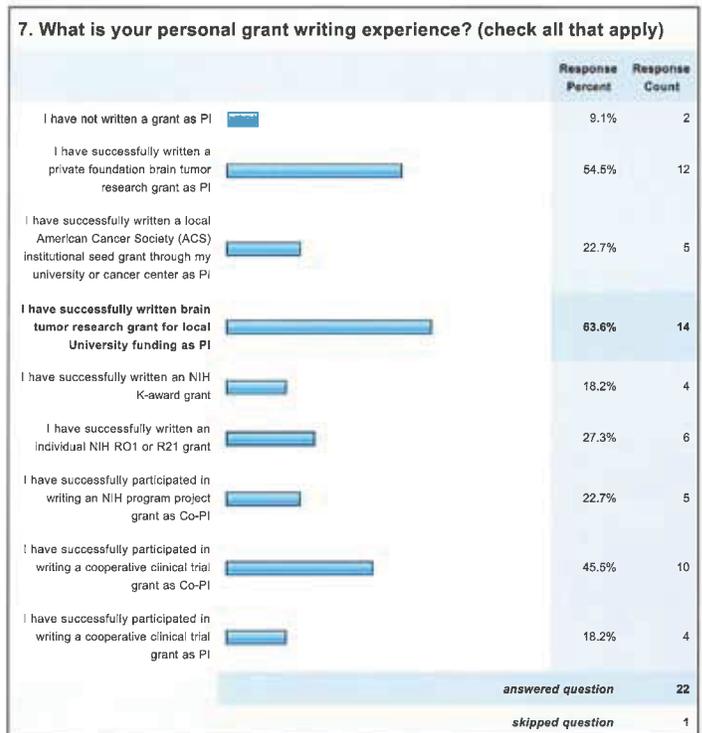
Taking responses received and normalizing back to the 37 regular SOT EC members, our survey indicates that the SOT EC alone could potentially marshal 472-594 brain tumor patients per year for enrollment in brain tumor CTs. Normalized to the whole SOT this number would certainly be much larger.

The open-ended question on the survey yielded several consistent observations for moving forward. First, members feel that initial SOT CTs should be focused on what surgeons do in terms of evaluating impact of extent of resection, the use of intra-operative imaging, the use of pre-surgical planning and brain mapping, as well as perioperative care. Second, the most common topic cited was interest in testing the need for prophylactic anticonvulsants for supratentorial meningiomas surgery.

Joint Tumor Section Clinical Trials Committee Survey



During the Winter and Spring of 2011, explorations by SOT CTC leadership with RTOG revealed broad support within the RTOG Brain Tumor Committee for pursuing a partnership with the SOT to jointly sponsor and enroll patients in jointly designed brain tumor CTs for those areas of study deemed to be within RTOG mission by the Cancer Therapy Evaluation Program (CTEP) of the NCI. There is also broad support for RTOG supporting the SOT as a contracted CRO for potential brain tumor CTs that fall outside of CTEP sanction. We are also pursuing obtaining representation in the new Alliance for Clinical Trials in ONcology (ACTON) merger of NCCTG, ACSOG and CALGB brain tumor committee in order to explore potential opportunities there. With the pending change in leadership of the SOT CTC under the guidance of Frederick F. Lang, MD, FAANS, FACS, from Mark E. Linskey, MD, FAANS, to Manish K. Aghi, MD, FAANS, we look forward to seeing the current momentum maintained, augmented and carried through to ultimate fruition.



Awards

Andrew Parsa, MD, PhD, FAANS

The Awards Committee continues to be active with 10 awards and one research grant award administered through the Tumor Section Awards Committee. Most of the awards are limited to AANS/CNS Tumor Section members, providing an additional incentive for membership. Support for the awards program encourages submission to our meetings of work of the highest quality in neuro-oncology.

Springer Journal of Neuro-Oncology Award

The *Journal of Neuro-Oncology* Award is sponsored by Springer Publishers and is presented at both the AANS and CNS Annual Meetings to a highly ranked abstract in either clinical or basic science as related to neuro-oncology. The 2011 AANS Annual Scientific Meeting recipient was Dr. Griffith Harsh IV, of Stanford University for his paper entitled, "NFKBIA in Glioblastomas: Tumor Suppressor and Potent Predictor of Outcome." A \$500 award and a framed certificate were presented to the winner.



Bittner Award

The Bittner Award is sponsored by Mrs. E. Laurie Bittner in memory of her husband, Ronald Bittner, and is awarded each year at the AANS Annual Scientific Meeting to the author of the best abstract submitted by a resident or junior faculty member. The 2011 AANS Annual Scientific Meeting winner of the Bittner Award was Dr. Isaac Yang of UCLA for his submission entitled "Vaccination with Dendritic Cells Pulsed with Autologous Tumor Lysate is Associated with Prolonged Survival Compared to Dendritic Cells Loaded with Tumor-Associated Antigens: Results from Prospective Phase 1 Clinical Trials." This award includes a \$1000 honorarium.



American Brain Tumor Association Young Investigator Award

Sponsored by the American Brain Tumor Association, the Young Investigator Award is given at each AANS and CNS Annual 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 less than six years. The 2011 AANS Annual Scientific Meeting winner was Dr. Ashok Asthagiri of the NIH for his abstract entitled, "Effect of Concentration on Accuracy of Convection Imaging Distribution of a Gadolinium-Based Surrogate Tracer." A \$2000 honorarium accompanied this award.

Leksell Award

The Leksell Award is given each year at the AANS Annual Scientific Meeting for the best submission related to stereotactic radiosurgery and includes a \$2000 honorarium. The 2011 AANS Annual Scientific Meeting Leksell Award winner was Dr. Robert Starke for his abstract entitled, "Gamma Knife Radiosurgery of Meningiomas Located in the Posterior Fossa: Factors Predictive of Outcome and Recurrence."

Brainlab Community Neurosurgery Award

The Brainlab Community Neurosurgery Award is awarded at the Annual Meetings of the AANS and CNS. This award is given to a neurosurgeon practicing in a non-academic setting with the best abstract related to central nervous system tumors. Dr. Leslie Nussbaum of St. Paul, MN, received this award at the 2011 AANS Annual Scientific Meeting in Denver for her paper, "Fractionated Stereotactic Irradiation for Periopic Lesions." Dr. Nussbaum was awarded \$1000.



Preuss Award

The Preuss Award, sponsored by the Preuss Foundation, is given at each of the AANS and CNS Annual Meetings to a young scientist investigating brain tumors, within 10 years of training and who has submitted the best basic science research paper. The 2011 AANS Annual Scientific Meeting winner was Dr. Ganesh Rao of MD Anderson Cancer Center for his presentation, "WIP1 Enhances Tumor Formation in a Sonic Hedgehog Dependent Model of Medulloblastoma." This award includes a \$1000 honorarium.



Integra Award

The Integra Foundation Award, sponsored by the Integra Foundation, is given at each of the AANS and CNS Annual Meetings for the best research or clinical paper submitted investigating benign brain, spinal or peripheral nerve tumors. At the 2011

AANS Annual Scientific Meeting, the winner was Dr. Sameer Sheth of Massachusetts General Hospital for his presentation, "Transsphenoidal Surgery for Cushing's Disease After Non-Diagnostic Inferior Petrosal Sinus Sampling." The award includes a monetary component of \$1000.



National Brain Tumor Society Mahaley Award

The NBTS Mahaley Award is given at each of the AANS and CNS Annual Meetings to a neurosurgery resident, fellow or attending who submits the best clinical study in neuro-oncology.

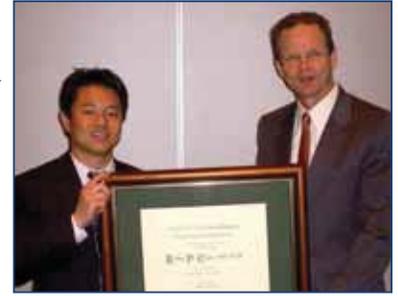
At the 2011 AANS Annual Scientific Meeting, the award was presented to Dr. Zachary Litvack of Brigham and Women's Hospital for his paper, "Indocyanine Green Fluorescence for Visual Differentiation of Pituitary Tumor from Surrounding Structures." In addition, Dr. Litvack was awarded a \$1000 honorarium.



Stryker Neuro-Oncology Award

The Stryker Neuro-Oncology Award is given to a high ranking brain tumor clinical or basic science abstract submitted by a resident or medical student. The award is presented at the CNS and AANS Annual

Meetings, and the senior author on the paper must be a member of the AANS/CNS Section on Tumors. The 2011 AANS Annual Scientific Meeting recipient of this award was Dr. Arthur Chou of UCLA for his paper, "Gliomatosis Elevated 2-Hydroxyglutarate (2-HG) in Human Glioma Samples Harboring the R132 Isocitrate Dehydrogenase 1 (IDH1) Mutation." A monetary component of \$1000 was included with an award certificate.



Synthes Skull Base Award

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 winner for the 2011 AANS Annual Scientific Meeting was Dr. Joshua Wind of George Washington University for his presentation, "The Surgical Management of Pediatric Cushing's Disease." The award includes a \$1000 honorarium.

The AANS/CNS Section on Tumors would like to thank the award sponsors for helping to encourage submission of the highest quality work in neuro-oncology. Congratulations to the 2011 AANS Annual Scientific Meeting award winners.

Self-Assessment in Neurological Surgery (SANS) Committee Report

Jason P. Sheehan, MD, PhD, FAANS and Sarah Jost, MD

In early 2011, the Self-Assessment in Neurological Surgery (SANS) committee began its annual rolling update. This update entails the introduction of 25% new questions to Maintenance of Certification (MOC) compatible SANS products such as the general, spine and pediatrics examinations.

SANS is also undertaking a review of the responses from subscribers. As SANS users know, the platform tracks your responses and provides you with a score. Each SANS question is categorized allowing us to identify knowledge gaps for each participant and for users as a whole. Such knowledge gaps may help to identify areas of importance for future educational initiatives of the Tumor Section. Knowledge gaps are vital for the planning of continuing medical education programs.

The Tumor Section specifically has reviewed their active question bank and has identified categories of question topics which are well represented as well as those that are relatively under represented. SANS aim is to cover pre-clinical and clinical tumor biology, primary and metastatic tumors, and both benign and malignant tumor types. On an annual basis, members of the Tumor Section who have expressed interest in participating in SANS are approached to contribute questions to the bank. This year several members contributed a significant number of questions focusing on low grade gliomas, and these efforts are greatly appreciated. Despite these excellent individual efforts, we are always looking for additional SANS question contributors. If you are interested in serving on the SANS committee, please email either author at: jsheehan@virginia.edu or scj_29@hotmail.com.

2011 AANS/CNS Section on Tumors Satellite Symposium

Michael Vogelbaum, MD, PhD, FAANS

The 2011 AANS/CNS Section on Tumors (SOT) Satellite Symposium will be held in conjunction with the 2011 Society for Neuro-Oncology (SNO) Annual Meeting. The joint meeting, to be held in Anaheim, Calif., from November 17-20, 2011, has been organized by a Scientific Program Committee which includes members of the SOT, and Co-Chaired by Michael A. Vogelbaum, MD, PhD, FAANS. In addition, Jason P. Sheehan, MD, PhD, FAANS, is a Co-Chair of the Education Day program. The program covers multiple clinical and laboratory research topics of interest to neurosurgical oncologists, and features the addition of special surgically-focused symposia and workshops. Andrew T. Parsa, MD, PhD, FAANS, has worked with our vendors to create special opportunities for hands-on demonstrations, which are likely to help make this meeting a net revenue opportunity for the SOT.

We have also included, for the first time, a Special Course on Clinical Trials for Young Investigators which was designed especially for neurosurgeons who are interested in developing expertise in clinical research.

Highlighted below are aspects of the Education Day and Scientific Program that may be of particular interest to our SOT membership:

- **November 17**
Education Day
Stereotactic Radiosurgery and Radiation Biology in the CNS

- **Clinical Trials Course for Young Investigators (Afternoon)**
Satellite Symposium (Evening)
Selection to Optimize Outcomes for Skull Base Tumor Patients
- **November 18**
Sunrise Sessions
Viral Gene Therapy; Surgery for Non-malignant Skull Base Tumors
- **SOT Luncheon Symposium**
Current state of the art: Vaccine development in the treatment of GBM
- **Immunology/Immunotherapeutics (Afternoon)**
November 19
Sunrise Session
Intraoperative Surgical Adjuncts for Visualizing Tumor
- **Surgical Therapies (Afternoon)**
November 20
Sunrise Session
Atypical and Malignant Meningiomas
- **Clinical Trials Update**

There also are multiple abstracts from SOT members that will be presented during the Plenary Oral Sessions held each morning of the meeting.

Finally, the President's Address will be given on Friday, November 18, by SNO President and Chair of the AANS/CNS Section on Tumors, Frederick F. Lang, MD, FAANS, FACS.

2011 Tumor Section Session Preview: CNS Annual Meeting

Daniel P. Cahill, MD, PhD

Cancer is a genetic disease. Advances in DNA sequencing technology have significantly improved the speed, cost and breadth of cancer genome analyses. Recently, a focused study of primary brain tumors has resulted in several important cancer genome discoveries, which will impact our classification and treatment paradigms for brain tumor patients in the future. To highlight these recent discoveries, and their clinical implications, the Tumor Section will host a group of experts during the afternoon session on Tuesday, October 4, at the 2011 CNS Annual Meeting in Washington, DC.

The session is entitled, "Genomic Alterations in Primary Brain Tumors" organized and moderated by Ricardo Komotar, MD, and Daniel P. Cahill, MD, PhD. The session will cover four molecular groups of gliomas: BRAF mutant tumors, IDH mutant tumors, 1p/19q co-deleted tumors and glioblastomas. Ian F. Pollack, MD, FAANS, will review the recent discovery of BRAF fusion-interstitial-deletion and V600E mutation in grade I gliomas and diffuse pediatric astrocytomas, which raise the possibility for improved classification schemes for these tumors, as well as identifying a pathway for potential therapeutic strategies. Then, we welcome William Parsons, MD, PhD, from Baylor College

of Medicine and Texas Children's Hospital, who will present his work discovering the IDH1 oncogene mutations characteristic of secondary glioblastomas, and grade II and III oligodendrogliomas and astrocytomas. Michael A. Vogelbaum, MD, PhD, FAANS, will report on the impact of the oligodendroglial chromosome 1p/19q co-deletion in clinical practice and in the international anaplastic glioma clinical trials, CODEL and CATNON. Finally, we look forward to Ken Aldape, MD, from MD Anderson Cancer Center, who will describe his recent work with the RTOG-0525 glioblastoma trial, and the derivation of a validated multigene predictor of glioblastoma outcome.

With the consolidation of the NCI clinical trial consortia for brain tumor trials into two groups, RTOG and ACTION, these molecular stratification factors are becoming a key part of the new standard in clinical trial design, holding promise for improved diagnostic categorization and individualized therapy. As tumor neurosurgeons, the importance of aggressive and safe surgical resection for tissue acquisition and initial cytoreductive therapy has never been greater. We look forward to a timely update on this rapidly expanding field.

International Committee Reports

Scotland

Sam Eljamel, MBBCh, MD, FRCS

The Scottish Adult Neuro-oncology Network (SANON) is having its national meeting in Edinburgh on November 4, 2011. The network encompasses five neuro-oncology MDT groups: Aberdeen, Dundee, Edinburgh, Glasgow and Inverness. During the meeting, neurosurgeons, radiation neuro-oncologists, neuro-radiologists and neuro-pathologists meet to review the work plan of the network and any gaps in neuro-oncology services will be addressed. During the meeting national guidelines as well as results of new research in the area will be reviewed, discussed and implemented.

The Fourth Fluorescence Guided Surgical Resection for High Grade Gliomas again took place at the University of Dundee on May 20, 2011.

This year's British Neuro-oncology meeting took place in Cambridge and the next SBNS meeting will be held in Brighton.

The next World Society of Skull Base Surgery will take place in Brighton, England, on May 16-19, 2012.

China

Yonggang Wang MD, PhD

The Sixth Neurosurgeons Branch Annual Meeting of the Chinese Medical Doctor Association was held April 15-17, 2011, in the city of Nanjing. As one of two major Chinese national neurosurgical meetings, more than 1,000 neurosurgeons from all over China attended this meeting. Many international neurosurgical experts were also invited to give wonderful lectures.

The Second China International Skull Base Conference was held August 6-7, 2011, in Beijing. The theme of this conference was still, "Skull Base Surgery: Multidisciplinary and Teamwork." The top surgeons in China in the fields of neurosurgery, ENT, ophthalmology, oral maxillofacial surgery, and head and neck surgery came together and presented their experiences on skull base surgery. They also talked about multidisciplinary collaboration among these specialties and how to improve microsurgical techniques of the skull base. Several famous international neurosurgeons from the US, Japan, Korea and throughout the world were invited to give lectures at the meeting.

Forthcoming meeting in China:

Chinese Neurosurgical Society Annual Meeting

October 13-15, 2011

Tianjin, China

www.cnsmeeting.com/2011/cn/

Australia

Charlie Teo, MD

Australia has continued pushing awareness and funding into brain cancer over the last six months. The national tumour banking project, AGOG, has been recruiting new centers and registration into the study has been encouraging. In NSW, scientists have forged key collaborations in the key areas of basic science and clinical research to fast track translation of their research to the patient. Dr. Kerrie McDonald from the Cure for Life Neuro-Oncology Laboratory and Professor Philip Hogg from the Molecular Innovations Laboratory (both from the University of NSW) are working together to deliver a new cancer metabolism drug. The preclinical studies are very exciting and phase I and II clinical trials are currently being designed. Dr. Gilles Guillemin from the Neuro-Inflammation Group, The University of NSW, has made significant inroads in his study of the kynurenine pathway involved in blood brain barrier disruption, evidenced by a recently accepted manuscript in *Nature*. Molecular pathology testing for patients with glioma is becoming routine. Dr. Michael Buckland, who is head of the University of Sydney, Pathology Department is now offering testing for the molecular markers: MGMT promoter methylation, IDH1 mutation testing with immunohistochemistry and sequencing, EGFR amplification and LOH 1p19q. This is the first laboratory in NSW offering all services to supplement

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Stereotactic Radiosurgery Update

Jason P. Sheehan, MD, PhD

Within the AANS/CNS Section on Tumors, stereotactic radiosurgery remains a vibrant part. This Fall, the first North American Gamma Knife users meeting will be held at the University of Pittsburgh from September 17-19. The meeting will feature past and present Tumor Section leaders including Gene H. Barnett, MD, MBA, FAANS, FACS, Michael A. Vogelbaum, MD, PhD, FAANS, Mark E. Linskey, MD, FAANS and Michael W. McDermott, MD, FAANS. The conference will focus on collaborative research and multicenter clinical trials in radiosurgery.

In addition, the joint meeting of the Society for Neuro-Oncology and the AANS/CNS Section on Tumors will hold an educational day program during its meeting later this year (November 17-20, 2011 in Anaheim, Calif.). The program will place strong emphasis on intracranial and spinal radiosurgery. Tumor Section leadership and members have played a significant part in the organization of the program, and many will teach at the day long program. The close collaboration of SNO and the AANS/CNS Section on Tumors as it relates to this educational initiative underscores the importance of radiosurgery to the care of neuro-oncology patients.

neuropathology. Led by Dr. Michael Rodriguez, synoptic reporting for neuropathology has recently been developed and information sheets are available to help pathologists to adequately assess the specimen. NSW continues to be involved in international clinical trials, including CATNON and two local trials: eXCENTRIC and Cabaret. Dr. Kerrie McDonald, Professor Charlie Teo and Dr. Helen Wheeler are involved in the Australian Genomics and Clinical Outcomes of Glioma (AGOG) project. Over 200 biospecimens (tissue, matched bloods and clinical data) have been collected and registered for research use. A project examining the utility of a new triple protein complex for identifying patients who respond to concurrent chemo-radiotherapy is currently underway using the AGOG resource. The Cancer Institute NSW Oncology Group (NSWOG) for NSW hosted a patient support forum in May 2011 to empower patients and their families battling brain tumours. Professor David Reardon (Dana-Farber Cancer Institute, Boston) gave a wonderful seminar to the patients. Over 200 patients, family members, friends and affiliated workers in neuro-oncology attended. This forum was also broadcast on the Internet. The seminars can be downloaded from www.cancerinstitutensw.org.au.

Western Australia (WA) continues to be active in brain tumor research. The coordinator of the Australian Genomics and Outcomes of High Grade Glioma (AGOG) project is housed in WA and continues to work collaboratively with investigators in New South Wales to build a biobank of tumor specimens and genomic DNA, with comprehensive clinical data. We now have over 600 patients consented to the AGOG project. In clinical 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 will open the COGNO CABARET study shortly. In local research, a quantitative study of patient and care needs is ongoing and will present preliminary data at the Clinical Oncology Society of Australia ASM in November.

Italy

Francesco DiMeco, MD

The next 14th Congress of the European Association of Neurological Surgeons will be held in Rome, October 9-14, 2011. The meeting will cover several topics of the neuro-oncology field including state of art of treatment of malignant gliomas, intraventricular tumors, management of brain metastases and intramedullary tumors. Frederick F. Lang, MD, FAANS, FACS, and Michael W. McDermott, MD, FAANS, have been invited to the meeting to deliver Special Lectures. This will provide a good opportunity to reinforce the ties between the EANS Neuro-Oncology Committee (NOC) and the AANS/CNS Section on Tumors to bolster the creation of a NOC/JST liaison.

England

Nitin Mukerji, MSc, MD, FRCS

Following a recommendation in the Improving Outcomes for People with Brain and other CNS Tumours (June 2006), the British Neuro-Oncology Society has been working with the National Cancer Action Team in producing national guidelines for rare brain and CNS tumours. A team of experts in this field has been working towards the creation of four new guidelines (Adult PNET, Primary CNS Lymphoma, Pineal and Optic Pathway Glioma). An alliance which brings together a number of brain tumour research centres in the south of England, was launched at the University of Portsmouth in the Summer of 2011.

Pediatric Neuro-Oncology Committee

George I. Jallo, MD, FAANS

This committee coordinates the interests of the AANS/CNS Section on Tumors with the AANS/CNS Section on Pediatric Neurological Surgery.

Upcoming Meetings:

39th Annual Meeting of the International Society for Pediatric Neurosurgery

October 16-20, 2011 in Goa, India, and situated on the South West coast and a Portuguese colony until the 1960's. The Organizing Committee has put together an enriching scientific and cultural program.

40th AANS/CNS Section on Pediatric Neurological Surgery Annual Meeting

November 29-December 2, 2011
Austin, Texas

35th Annual Meeting of the American Society of Pediatric Neurosurgeons

January 29-February 3, 2012
St. Regis Bahia Beach Resort
Puerto Rico

Recent Publications:

There have been two recent review articles published that are worthwhile to all readers. These papers published in *Journal of Neurosurgery: Pediatrics* are a "must read" for all who treat children with brain tumors. There is a complete and thorough bibliography.

Multidisciplinary Management of Childhood Brain Tumors: A Review of Outcomes, Recent Advances and Challenges

Ian F. Pollack, MD, FAANS

Epigenetic Mechanisms Regulating Neural Development and Pediatric Brain Tumor Formation

Claudia M. C. Faria, MD, James T. Rutka, MD, PhD, FAANS, Christian Smith, PhD and Paul N. Kongkham, MD

The South of England Brain Tumour Alliance (SEBTA) draws together seven neuro-oncology centres spread across universities and hospitals involved in brain tumour diagnosis, therapy and research. The establishment of the new Alliance, led by Geoff Pilkington, Professor of Cellular and Molecular Neuro-oncology at the University of Portsmouth, will create a comprehensive and sustainable environment for continued growth of neuro-oncology research. Current SEBTA members include Derriford Hospital and Peninsula College of Medicine and Dentistry in Plymouth, The Bristol Royal Infirmary and the Frenchay and Southmead Hospitals in Bristol, Imperial College London, Charing Cross Hospital and King's College Hospital in London, Hurstwood Park Neurosciences Centre and Southampton General Hospital. Reducing the diagnosis time should reduce long-term disability that many children and young people diagnosed with a brain tumour currently experience. The aim of the HeadSmart Campaign, launched in June 2011, is to reduce the time it takes to diagnose children and young people with brain tumours in the UK by educating healthcare professionals and the public about

the symptoms of brain tumours in children and young people. The HeadSmart Campaign is run by a partnership between the Children's Brain Tumour Research Centre (CBTRC) at the University of Nottingham, the Royal College of Paediatrics and Child Health (RCPCH) and Samantha Dickson Brain Tumour Trust (SDBTT), and funded by The Health Foundation and SDBTT. These diverse organisations have joined force to tackle the issue of brain tumour awareness in order to speed up diagnosis times.

Upcoming meetings in the UK are:

- Brain Tumour UK, Annual Patient Conference
September 21-22, 2011
Glasgow
- NCRI Cancer Conference, Joint NCRI/BNOS symposium
November 6-9, 2011
Liverpool

ABTA Clinical Research Grant

Howard L. Weiner, MD, FAANS

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 the 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 of \$50,000 dedicated in support. In 2008, the first grant was awarded to John H. 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 T. Parsa, MD, 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.

Skull Base

Nicholas B. Levine, MD

The Senior Neurosurgical Residents and Head and Neck Fellows Practical Dissection Workshop was held in New Orleans, LA, from July 29-August 1, 2011, for aspiring skull base surgeons.

The 22nd North American Skull Base Society (NASBS) Annual Meeting

Las Vegas, NV

February 17-19, 2012

A pre-meeting practical dissection course will be offered February 15-16, 2012. This year's theme will be "Managing Risk at the Skull Base." The online abstract center is open at www.nasbs.org until September 30, 2011. The multidisciplinary meeting will again bring together neurosurgeons and head and neck surgeons, to discuss the evolving roles of surgery and radiation for skull base pathologies.

The 6th International Congress of the World Federation of Skull Base Societies and 10th European Skull Base Society Congress

Brighton, UK

May 16-19, 2012

Abstracts will be accepted until December 1, 2011

These upcoming meetings provide opportunities to explore skull base surgery and its contributions to neuro-oncology.

Committee Report: Academic Community Alliance (ACA) Initiative

Aaron Cohen-Gadol, MD, FAANS and Brian T. Ragel, MD, FAANS

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

Under the direction of Aaron Cohen-Gadol, MD, FAANS, the ACA is attempting to leverage the power of the Internet to allow neurosurgeons to solicit and provide advice related to

challenging tumor cases (www.neurosurgicalatlas.com/index.php/aans). This neurosurgery specific educational website allows users to submit difficult cases for opinion and offers an open blog for neurosurgeons to comment (Figure 1). Time permitting, cases are reviewed by experts in the field, and vetted in comment fashion by the neurosurgical community at-large.

Ultimately, the ACA Tumor Committee wishes to develop an open dialogue between neurosurgeons for the benefit of patients.

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