Tumor EWS





Spring 2008

AANS/CNS Section on Tumors

Editor: Andrew Sloan, MD, FACS



In This Issue...

A Wealth of Information at Tumorsection.org

Tumor Section Develops Evidence-Based Guidelines

Society of Neuro-Oncology Meeting Report

5 Tumor Highlights at 2008 AANS Annual Meeting

Tumor-Related Practical Courses

7 Tumor Highlights at 2007 CNS Annual Meeting

> 8 CCI Committee Report

Washington Committee Update

10 Awards Committee Report

12 Tumor Section/BrainLAB International Research Fellowship Awarded

13
AANS Online Case Studies

14 Immunotherapy Task Force Report

Journal of Neuro-Oncology: Editors Message

From the Chair: By the Members, For the Members



Michael W. McDermott, MD

It's hard to believe that it is spring 2008 already! It doesn't seem that long since the 2007 CNS Annual Meeting, but the Executive Committee members have been working on maintaining and improving the Section on Tumors for its members. Several key

events have taken place in the last several months.

First, the 2008 AANS program has come together nicely thanks to the hard work of Khaled Aziz, MD. Our first Tumor Section session is on Monday, April 28, from 2:45 to 5:15, followed by a young members' reception. This is an excellent opportunity for young neurosurgeons to meet some of the more senior members of the Tumor Section. Thereafter we have two timely and topical symposia: on Tuesday, April 29, suprasellar meningiomas, endoscopic versus microsurgical removal, and on Wednesday, April 30, stem cells. Thanks go to Dr. Aziz and other Tumor Section members for their time in reviewing abstracts as well as providing our featured lectures.

Second, the Brain Metastases Guidelines effort under the direction of Mark Linskey, MD, and Steven Kalkanis, MD, is under way. Several conference calls were held and the initial work and review by the McMaster group has begun. This is an important project, the first of its kind for a section, and we owe thanks to Dr. Linskey for his tireless efforts in getting this project off of the ground.

Third, we are pleased to report that the Tumor Section, the Society for Neuro-Oncology and the CNS have come to an agreement about our 2009 joint satellite meeting prior to the 2009 CNS

Annual Meeting in New Orleans, La. We thank the AANS staff; Ab Guha, Susan Chang and Chas Hayes from the SNO; and Tony Asher and the CNS staff for participating in several phone calls to make this happen. Randy Jensen, MD, will codirect the joint satellite meeting with Fred Lang, MD, from SNO and, if the meeting is successful, we hope to repeat this effort in another eight years. This promises to be a great opportunity for the Tumor Section and the SNO to co-host a unique "cross-specialty" meeting.

Fourth, the Academic Community Alliance Web site is a reality! Jonas Sheehan, MD, has done a great job in his joint role as director of member services and the Web site. Members are encouraged to register as members of the ACA through our Web site, www.tumorsection.org. This effort to bring community and academic centers together for the treatment of brain tumor patients was conceived by Tony Asher, MD, and is gaining momentum. The ACA Web site is a cornerstone of this effort. This is another example of section leaders setting another "first."

Looking forward to the next few months, we anticipate several key events: the naming of the first American Brain Tumor Association clinical research awardee; results of voting on the bylaws amendments by the membership; soliciting a new round of applications for the National Brain Tumor Foundation Translational Research Grant Award; finalizing the 2008 CNS program for the Tumor Section; the International Conference on Meningiomas and the Cerebral Venous System in Boston, Mass.; the Skull Base Society meeting in Vancouver with Franco DeMonte, MD, as president; and pulling together the Tumor Section's 25th anniversary dinner at the AANS 2009 meeting in San Diego, Calif. These are busy and exciting times for those of us with an interest in tumors of the nervous system. Enjoy!

A Wealth of Information at Tumorsection.org

Jason P. Sheehan, MD

In an effort to stay current in today's world of rapid information exchange, the Tumor Section has made available online a great deal of information and communications to section members. This has been achieved primarily through the section's revamped Web site, www.tumorsection.org, as well as other cooperative Web-based efforts.

The section's Web site serves primarily as a source of information for section members. Through this site, users can find information regarding upcoming meetings and anticipated tumor-related highlights with links to early registration and meeting programs. Ongoing activities of the section are reported on the Web site, with updates of particular interest to section members from the subcommittees of the section as well as the CNS and AANS. Regular communication from international partners is also included in the Web site for a global perspective on brain tumor progress and treatments. Previous Tumor Section newsletters are available in the newsletter archive; however, the most recent Tumor Section newsletter is only available in the password-protected Members' section of the site. (The Members' section may be accessed with user name "tumor" and password "section.") The Tumor Section's mission statement, committee designations, bylaws and history are included on the site for reference, as is a searchable database of section members.

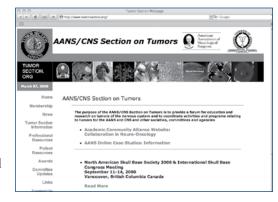
To support the section's education and research missions, the Web site provides a comprehensive list of fellowship opportunities in neuro-oncology and cranial base surgery. In the Members' section, sources of research funding are provided with information pertinent to each source and a link to each foundation's site. The Members' section also hosts a compilation of well-developed, scientifically sound guidelines regarding the treatment of brain tumors with an explanation of the scientific method behind guideline development.

The Tumor Section currently offers 12 awards for outstanding work performed to further the field of neuro-oncology. Those awards are listed in the Members' section of the Web site, along with a description of each and a list of previous winners.

The Academic Community Alliance is an initiative of the Tumor Section that is intended to enhance communication among brain tumor specialists with the intent of disseminating current knowledge related to brain tumor therapies and promoting the development and implementation of clinical research programs in neuro-oncology. The ACA Web site is designed to facilitate interaction and collaboration among the ACA members in addition to providing information regarding clinical trials and participation in interactive learning opportunities. The site lists news updates from the ACA in addition to examples of areas of the country where community and academic collaborations are currently used successfully.

The ACA membership list is searchable by criteria entered at the time of profile creation for the ACA Web site. The list of members generated by this search includes check boxes next to the names of the members, which allows one to easily e-mail some or all of the members at once. This feature is designed to facilitate discussion among ACA members.

The Clinical Trial section of the Web



site lists links to clinical trial education sites and also provides lists of clinical trials available in neuro-oncology. Several large multicenter cooperative trials have been listed in the ACA Endorsed Priority Cooperative Trials, but the goal of the ACA is to populate the list of trials with member-generated trial information. Members are encouraged to provide information regarding open clinical trials through the form available at Add a Clinical Trial, which will subsequently be added to the master list of trials. Trials can also be listed by Investigator Initiated Trials and Industry Trials.

The Web site provides educational updates through the Select and Quarterly Topic Reviews in Neuro-Oncology. Select Reviews are brief summaries and reviews of important articles in the field of neuro-oncology. Quarterly Topic Reviews are more in-depth reviews of a general topic in neuro-oncology.

Interactive Learning opportunities consist of the Case of the Month, a case presentation followed by several multiple-choice questions, and the Survey of the Month, a brief survey question. Members' answers to these questions will be tabulated, analyzed, and passed back to the membership in future Grand Rounds. Members are encouraged to submit a case through the site to be used for future cases of the month. The Topic Discussion of the Month is a forum area for members' open discussion on a topic posed by the ACA each month.

Lastly, in light of the American Board of Neurological Surgery's requirements for Maintenance of Certification, the Tumor Section strongly supports participation in the AANS Online Case Studies. This initiative of the AANS Information Technology Committee is designed to accumulate a large resource of online cases for review and teaching. These cases are intended to help prepare surgeons for board certification or recertification as well as to provide a tool through which neurosurgeons can learn from each other. We encourage all neurosurgeons to consider submitting a case to the Online Case Studies project through www.MyAANS.org (see page 13 for more information).

Tumor Section Develops Evidence-Based Guidelines

Mark E. Linskey, MD

Evidence-linked clinical practice guidelines are an increasingly important initiative area for neurosurgery and for our patients. They are an important clinical tool with potential to improve the quality of patient care and reduce unexplainable or unnecessary variation in clinical practice. They are increasingly being sought as sources for both process and efficiency quality measures in Centers for Medicare and Medicaid Services demonstration projects and regulatory and legislative policy development, and they will likely be linked in some form to reimbursement through either pay-for-performance incentives or policy proscriptions. The need for our own high-quality, evidence-linked clinical practice guidelines in neuro-oncology to offset guidelines recommendations of lower quality from other sources—that often fail to include sufficient multidisciplinary representation, or rely on either informal or formal consensus processes rather than strict evidence-linked methodology—has never been greater.

For quite some time the Tumor Section has been pursuing the goal of developing multidisciplinary evidence-based guidelines of the highest quality for treating patients with brain tumors. Initial efforts for low-grade gliomas and for patients with single metastatic brain tumors led to useful review articles, but were never approved by the AANS or CNS as formal clinical practice guidelines. In 2002 two new efforts were begun in the areas of newly diagnosed glioblastoma multiforme and pituitary adenomas. Ably led by Jeff Olson, MD, the initial draft of GBM guidelines was completed in spring 2007 and the final draft was approved by the Joint Guidelines Committee and then by the AANS and CNS in the fall of 2007. This effort represents the first Tumor Section clinical practice guidelines effort to be carried forward to final completion and official approval as an evidence-linked

clinical practice parameter guideline. Dr. Olson and his team are to be congratulated for completion of this five-year effort, which will benefit both our profession and our patients. It is slated to be published in the section's journal, the *Journal of Neuro-Oncology*, this spring.

The pituitary adenoma project, led by Nelson Oyesiku, MD, is moving forward. Now entering its sixth year, all eight chapters have reached initial draft form and are being reviewed and edited online by the multidisciplinary writing groups. Once this step is completed, the draft will be forwarded to the Joint Guidelines Committee for initial review and feedback.

The development of the highest quality evidence-linked clinical practice guidelines in major strategic areas for neurosurgery requires a monumental amount of time and effort for projects like those outlined above when they are conducted solely through volunteer physician efforts. In recognition of this fact, the Joint Guidelines Committee, the CNS and the AANS have embarked on an experiment to see if contractual partnerships with AHRQ-recognized and funded evidence-based practice centers can help us more quickly develop guidelines without sacrificing methodological quality.

The Tumor Section and the clinical area of management of brain metastases were chosen for the initial test case. After a competitive proposal and bidding process lasting six months, the final contract between McMasters and the AANS and CNS was concluded. In December 2007 the multidisciplinary initiative with a fast-track timeline of 12 to 15 months was launched under the leadership of Steve Kalkanis, MD. It will be very exciting to see how this effort unfolds over the next year. If the project is successful, it may blaze the trail for a new guidelines development paradigm within our specialty.

Young Neurosurgeons News

Jay Jagannathan, MD

The Young Neurosurgeons Committee organized the Tumor Section's new member reception at the 2007 CNS Annual Meeting in San Diego. The overall goal of the Young Neurosurgeons reception was to provide an opportunity for younger section members to meet more senior membership in an informal atmosphere. The reception was an overwhelming success, with more than 150 attendees in total. Fred Barker, MD, from Massachusetts General Hospital gave a humorous talk on historical aspects of neurosurgery and the history of the surgeon in the romance novel. The section would like to acknowledge the contributions from the 2007 sponsors, which included Integra, MGI Pharma, Synthes and Compass Surgical.

The 2008 new member reception will be held on April 28 during the AANS Annual Meeting in Chicago. This year's speaker will be Michael McDermott, MD, from the University of California, San Francisco, who will discuss head injury during auto racing. The reception already has received generous contributions from Synthes and the Focused Ultrasound Foundation. More details regarding the reception will be

disseminated via e-blast closer to the meeting date.

In addition to the receptions, the Young Neurosurgeons Committee is also working with the Membership Committee on ways to increase membership in the Tumor Section. Tumor Section member benefits for young faculty will be advertised in the Young Neurosurgeons Committee/AANS e-blasts, as well as in the Young Neurosurgeons Committee newsletter, which is e-mailed to residents under the age of 40 twice a year prior to the CNS and AANS annual meetings.

Lastly, the Young Neurosurgeons Committee continues to encourage resident participation in Tumor Section courses and events during the AANS and CNS meetings via the Marshalls program. Marshalls are given free admission to the courses in which they choose to participate. Sign-up for the 2008 marshalling opportunities occurs in late February and in March, and any interested residents and fellows are strongly encouraged to take advantage of this opportunity.

Society of Neuro-Oncology Meeting Report

Randy Jensen, MD, PhD

The 12th Annual Scientific Meeting and Education Day of the Society of Neuro-Oncology was held Nov. 15-18, 2007, at the Gaylord Texan Convention Center in Dallas, Texas. Of the 946 registered attendees, 755 hailed from the United States while 171 arrived from 26 countries around the world. The meeting attracted specialists with a broad spectrum of interests. Neurooncologists represented 38 percent of those in attendance, but they were joined by an audience with diverse backgrounds: 15 percent neurosurgeons, 13 percent basic scientists, 9 percent medical oncologists, 6 percent pathologists, 7 percent pediatricians, 6 percent radiation oncologists, 2 percent nurses, 1 percent epidemiologists, and 1 percent biostatisticians. The AANS/CNS Section on Tumors was well represented among the organizers of the meeting, with neurosurgeons Michael Vogelbaum, Michael Taylor, Andrew Sloan and Antonio Chiocca serving on the Scientific Program Committee and Fred Lang, Randy Jensen and Antonio Chiocca helping with the organization of the Education Day.

The meeting began on Thursday with the traditional Education Day, which this year focused on glioma management. The activities consisted of two concurrent sessions, one on new targeted therapies and the other on mouse models. Sack lunches were provided each day, allowing attendees the opportunity to discuss the topics of the day and see old friends.

The main session, entitled "Navigating the New Targeted Therapies," focused on the use of small molecule inhibitors, antibodies, and both passive and active vaccines for treatment of brain tumors. The challenges of various approaches to drug delivery into the central nervous system were discussed, as well as how best to carry out clinical trials to implement and test these approaches. The session began with an overview by the chair of the Education Day Committee, Lois Lampson, PhD, from the Department of Neurosurgery at the Brigham and Women's Hospital. Dr. Lampson described the current state of immunotherapy as a means of delivering "targeted therapies." She was followed by Janice Reichert, MD, from the Tufts Center for the Study of Drug Development, who discussed "Development Trends for the New Targeted Cancer Therapeutics." In her talk, Dr. Reichert told the audience that although the average number of candidate therapeutic agents entering clinical trials in the United States doubled over the past 15 years, these agents required on average seven years to complete approval phases, and the success rate was only 8 percent. In fact, no cancer vaccine agents have been approved in the United States to date.

Next, Nancy Lin, MD, a medical oncologist from the Dana Farber Cancer Institute, described her clinical experience with targeted therapies for metastatic disease. Dr. Lin noted that difficulties in delivery and development of drug resistance to both small molecule inhibitors and monoclonal antibodies seem to be the main issues in this area of neuro-oncology. A.G. de Boer, MD, from the Blood Brain Barrier Research Group at the University of Leiden in The Netherlands, spoke on "Local and Systemic Therapies for Brain Drug Delivery." A. Raja Choudhury, MD, from the Karolinska Institute described his vision of the future of active specific immunotherapy in

his talk, "Why Struggle With Cancer Vaccines." He described some of the limitations associated with immunotherapy and the creation of tumor-specific vaccine therapies. Andre Rogatko, PhD, from the Department of Biostatistics at Emory University presented "Getting More From Our Clinical Trials," in which he described methods of safely escalating dose and calculating the patient numbers that are required for answering questions of clinical efficacy in human clinical trials. Ian Pollock, MD, director of the University of Pittsburg Brain Tumor Program, discussed "Targeted Therapies for Different CNS Tumors, for Different CNS Sites." He told the audience that there are a number of relevant molecular targets that could be exploited in therapeutic studies but "robust preclinical modeling" is necessary to prioritize these agents and a single drug approach is unlikely to be effective. Roy S. Wu, PhD, from the Clinical Grants and Contracts Branch of the National Cancer Institute spoke on funding opportunities. He gave grant application tips, discussed ways to search for funding opportunities that fit with the type of research one is interested in, and described some of the current funding opportunities. The session ended with a description of non-federal funding opportunities by Naomi Berkowitz, who represented private funding groups.

After the Education Day, the main programs of the annual meeting included "Sunrise Sessions," plenary sessions in the mornings, concurrent afternoon sessions, and evening poster sessions. The Sunrise Sessions, held during breakfast each day, involved discussions of diverse topics including angiogenesis and models to test angiogenesis; blood-brain barrier approaches; meningiomas; medulloblastomas; oligodendrogliomas; novel clinical trial design; creation of clinically relevant brain tumor models using stem cells, animal models, and primary tissue; microRNAs in gliomagenesis and therapy; a primer on mining the Cancer Genome Atlas; and the clinical future of temozolomide and EGFR inhibitors.

On Friday, the morning plenary session was a special seminar on pediatric neuro-oncology sponsored by the Pediatric Brain Tumor Foundation. The pediatric neuro-oncology sessions continued the rest of the day; open papers and discussions of cancers prevalent in the pediatric population including medulloblasoma and ependymoma as well as therapies relevant to this patient population were heard. Meanwhile, there was a concurrent afternoon session that included talks on how to use the Cancer Genome Atlas in the study of glioblastoma multiforme, an update on low-grade gliomas, and a discussion of current imaging techniques. Standing room only in each of the sessions demonstrated the great interest in these topics. The session on low-grade gliomas included clinical talks analyzing various aspects of these tumors. In one talk, the results of a Phase II study of prolonged daily temozolomide for low-grade gliomas were presented and suggested promise of increased survival in patients with recurrent or unresectable disease. In another, researchers from the University of California, San Francisco, correlated the extent of surgical resection with prolonged patient survival. Next, the role of radiation in low-grade gliomas was examined from a clinical efficacy point of

continued on page 5

Tumor Highlights at 2008 AANS Annual Meeting

Khaled Aziz, MD, PhD

The AANS/CNS Section on Tumors program for the 2008 AANS Annual Meeting in Chicago April 26–May 1 will cover two interesting topics.

On the first day (Tuesday, April 29), the program will focus on a challenging surgical topic that has not been covered in the previous tumor section meetings: "Suprasellar Meningiomas: Thoughts and Strategies for Microscopic Versus Endoscopic Surgical Resection."

Moderators:

Khaled Aziz, MD, PhD; Franco DeMonte, MD Faculty:

Amin Kassam: "Endoscopic Resection of Suprasellar Meningiomas"; Ossama Al-Mefty: "Microscopic Resection of Suprasellar Meningiomas"; Harry van Loveren: "Endoscopic Assisted Microsurgical Resection of Suprasellar Meningiomas"

Participants will learn to explain the pros and cons of minimally invasive surgery; discuss the anatomical barriers to suprasellar meningiomas; discuss safe optic foramenotomy and dissection around the encased optic nerve and/or the internal carotid artery branches; discuss the importance of dural repair; and discuss operative time, cosmetics and postoperative recovery.

On the second day (Wednesday, April 30) the program will cover an exciting neuroscience topic that might affect the future of neuro-oncology: "Stem Cells in Brain Tumors."

Moderators:

Antonio Chiocca, MD, PhD; Jeffrey Bruce, MD Faculty:

Alfredo Quinones: "Human Neural Stem Cells: Current Evidence"; Vivian Tabar: "Human Embryonic Stem Cells"; Peter Dirks: "Cancer Stem Cells in Brain Tumors of Mice and Man"

Participants will learn to discuss the existence of human brain stem cells and their location in the subventricular zone; explain potential utilization of human neural stem cells in the diagnosis and treatment of CNS diseases; explain the directed differentiation of human embryonic stem cells into specific cell types, with emphasis on the central nervous system; discuss the potential use of human embryonic stem cells as replacement tools in the CNS disorders; discuss the current status of somatic cell nuclear transfer and reprogramming; and explain the hypothesis of cancer stem cells and how it applies to human brain tumors.

Society of Neuro-Oncology continued from page 4

view. These talks were supplemented by basic science talks exploring contemporary views on the biology of radiation injury, radiation-induced inflammation and microglial response, rat models of optic neuropathy, and the effects of radiation on neural progenitor cells and neurogenesis. The imaging session focused on the pitfalls in measuring treatment response with current imaging techniques. This issue was examined in further detail in a discussion of the special challenges faced in anti-angiogenic agent trials and surgically based studies.

The morning plenary session on the second day of the meeting focused on pathology and prognostic markers. In the afternoon, concurrent sessions covered stem cells, tumor biology and experimental therapeutics, epidemiology and quality of life, immunology and immunotherapy. In addition, there was a special session of the Academic Community Alliance in which the speakers discussed the new ACA Web site as well as opportunities for medical oncology and radiation oncology participation in this new society. The presenters in the session on prognostic markers discussed the role of 1p/19q loss in oligodendrogliomas, methylation profiling for glioma grading, and prediction of response to temozolomide chemotherapy. One of the highlights of this session as well as the meeting as a whole was the keynote address, which was supported by The Brain Tumor Society and given by Chuck Stiles, MD, on the topic of "Transcription Factors and Malignant Glioma in Mouse and Man." He updated the audience on his work concerning oligodendrocyte lineage genes such as Olig 1 and 2. He also described how transcription factors including sonic hedgehog (Shh), platelet-derived growth factor (PDGF), and ciliary neurotrophic

factor (CNTF) direct neural precursor cells into distinct developmental pathways.

Two evening poster sessions included more than 400 abstracts on angiogenesis, cell biology, genomics, immunology, invasion, preclinical models, medical therapeutics—pediatric and adult, pediatric basic science, pharmacology, radiology, radiation oncology, epidemiology, experimental therapeutics, pathology and prognostic markers, quality of life, stem cells, and surgical therapies. Crowds surrounded every poster on both evenings during the wine and cheese reception, which provided a relaxed opportunity to discuss the poster data with the authors.

On the final day of the conference, Paul Mischel, MD, professor of Pathology and Laboratory Medicine at the University of California, Los Angeles, presented the Farber Lecture. The Farber lectureship recognizes a promising new investigator who has achieved significant results early in his career. Dr. Mischel described his work on signal transduction in malignant gliomas and discussed refining molecular subclassifications for better neuropathological classification and to identify new targets that might be used to guide patient therapy. After this interesting presentation, the remainder of the meeting included talks on clinical trials for glioblastoma multiforme.

Once again, this meeting was a stimulating mixture of basic science and clinical research. The focus on neuro-oncology with multidisciplinary attendance makes this the premier meeting for those whose clinical interests include management of patients with tumors of the central nervous system. Neurosurgeons with clinical interest in neurosurgical oncology should consider attending this meeting every year.

Tumor-Related Practical Courses

Andrew T. Parsa, MD, PhD

The practical courses associated with the AANS/CNS Section on Tumors continue to be well attended, and survey feedback of attendees continues to be positive. At the 2007 AANS Annual Meeting, a new practical course was added that focuses on local delivery methods. This course was well-received, and attendee surveys indicated that there was sufficient interest to continue the course in 2008. Following is a list of practical courses that relate to the Tumor Section for the upcoming AANS meeting, April 26–May 1 in Chicago, and the recent CNS meeting.

AANS 2008

Meeting details are available at www.aans.org/annual/2008.

1. Practical and Technical Aspects of Transsphenoidal Surgery Course Directors: William T. Couldwell, MD, PhD, and Gail L. Rosseau, MD

Description: This clinic will review traditional transsphenoidal approaches and present contemporary modifications of the technique, including endoscopic approaches. This clinic will also update the neurosurgeon on current medical and radiosurgical adjuncts to transsphenoidal surgery.

2. Update on Tumors for the General Neurosurgeon *Ieffrey N. Bruce, MD, FACS*

Description: This clinic will provide the practicing clinician with an up-to-date overview of current management strategies for all types of benign and malignant brain tumors. This seminar includes current research topics but emphasizes practical management issues.

3. Cranial Radiosurgery

Course Director: Antonio A. F. De Salles, MD, PhD Description: This clinic will illustrate various radiosurgery methods currently available.

4. Local Delivery Methods for Adjuvant Treatment of Brain Tumor Patients

Course Directors: Russell R. Lonser, MD, and Andrew T. Parsa, MD. PhD

Description: Local delivery methods for adjuvant therapy of intrinsic brain tumors have evolved from experimental studies into standard of care treatment. In this practical update a wide range of local delivery modalities will be discussed including polymers, convection, blood brain barrier disruption, endovascular techniques and local delivery of radiation. Practical examples of clinical applications for each of these methods will be reviewed, and the current status of experimental therapies in clinical trial will be discussed. At the conclusion of the course, participants will have a refined understanding of what delivery methods are currently available for standard of care treatment, and what methods are currently in later stages of clinical development. A review of clinical trial results, ongoing clinical trials and centers of participation will be provided as well.



Buckingham Fountain, Chicago, Ill.

CNS 2007

1. Brain Tumor Update Course

Course Directors: Jeffrey J. Olson, MD, and Jeffrey N. Bruce, MD, FACS

Description: This course will provide the practicing clinician with an up-to-date overview of current management strategies for major types of benign and malignant brain tumors. The seminar includes current research topics but emphasizes practical management issues. Upon completion of this course, participants will be able to discuss the state-of-the-art management of benign and malignant brain tumors including glial tumors, meningiomas, acoustic neuromas, skull base tumors, pediatric tumors and metastases, and discuss current concepts in glioma management including surgical techniques, adjuvant treatments, tumor biology and practical clinical management decisions.

2. Cranial Radiosurgery: Current State-of-the-Art

Course Director: Andrew E. Sloan, MD

Description: This course will familiarize participants with the basic features of the most commonly used radiosurgery treatment platforms, and their similarities and differences. It will provide participants with basic principles for radiosurgery treatment planning for benign and malignant tumors, AVMs and functional disorders, and with practical experience in planning treatments with expert guidance using various radiosurgery treatment platforms.

3. Pediatric Brain Tumor Update

Course Directors: James T. Rutka, MD, PhD, and Corey Raffel, MD, PhD

Description: This course will provide the practicing neurosurgeon and the neurosurgery resident with an up-to-date overview of current management strategies for all types of benign and malignant brain and spinal tumors that occur in the pediatric population. The course will focus on practical management issues and neurosurgical approaches in particular for pediatric brain tumors through a series of didactic lectures and video demonstrations given by established pediatric neurosurgeons.

Tumor Highlights at 2007 CNS Annual Meeting

Howard Weiner, MD

The AANS/CNS Section on Tumors held a very successful program at the CNS Annual Meeting in San Diego Sept. 15–20, 2007. This meeting featured integrated medical learning as a major component of the CNS educational program, thanks in large part to the tremendous efforts of Tumor Section member and 2008 CNS President Anthony L. Asher, MD. On the first morning of the meeting, Monday, Sept. 17, the Tumor Section led off the IML program with a session entitled, "Navigating Rational Treatment Strategies for Brain Metastases: Data and Practice," moderated by Fred Barker, MD, and Michael Vogelbaum, MD. After case presentations and audience participation, an expert discussion was conducted by Minesh Mehta, MD, and Stephen Tatter, MD, on "Up-Front Therapies for Patients with Brain Metastases."

Another highlight of the program was the CNS Neurosurgical Forum, which included all of the original science in the program. The Open Paper session featured 12 oral platform presentations focusing on tumors, representing the best, cutting-edge original science at the meeting. Three of the six Tumor Section awards presented at the CNS meeting were featured in this oral platform session: the Preuss Resident Research Award, the Synthes Skull Base Award, and the Mahaley Clinical Research Award. An expanded and enhanced Select Abstract session provided the authors with an opportunity to present their work during a multidisciplinary open Poster Session in the CNS Neurosurgical Forum arena after the Open Paper programs. Three additional Tumor Section awards were included in the Select Abstracts, the BrainLAB Community Neurosurgery Award, the Integra Foundation Award, and the Tumor ABTA Young Investigator Award.

The Tuesday and Wednesday afternoon educational programs for the Tumor Section were new and interactive. The Tuesday session focused on Pediatric Brain Tumors ("Innovative Functional Mapping Techniques for Resecting Cortical Tumors in Children"). This lively session, moderated by Jeff Wisoff, MD, featured thought-provoking case presentations, interactive software, and audience participation utilizing the VisionTree system, which presented audience responses in real time. This session also included three lectures: non-invasive techniques in children (such as fMRI, MEG, DTI) by James Rutka, MD; awake craniotomy in children with brain tumors by Nicholas Barbaro, MD; and staged surgical resection (grid extraoperative mapping) as a method for treating pediatric brain tumors in eloquent brain regions by Howard Weiner, MD. This interactive program is being assessed as a teaching method in neurosurgical continuing education, and the plan is to publish this experience in Neurosurgery.

The Wednesday program, introduced by Edward Laws, MD, focused on young neurosurgeons ("Young Neurosurgeons as Neuro-Oncologic Scientists"). This session included three brilliant talks by junior investigators, with a senior discussant for each talk in three major areas of basic neuro-oncologic research:

biologic therapy (junior: Manish Aghi, MD; senior: Antonio Chiocca, MD); stem cells (junior: Peter Dirks, MD; senior: Gene Barnett, MD); and bioinformatics (junior: Michael Taylor, MD; senior: Peter Black, MD). Participants had the privilege of being exposed to the latest cutting-edge neuro-oncology basic research being conducted by neurosurgeons. The senior discussants were then able to put this work into a larger context, reflecting on future directions in the field.

In summary, the 2007 CNS meeting was a true educational success for the Tumor Section.

Tumor Section Symposia at 2008 CNS Meeting Alfredo Quinones, MD

The AANS/CNS Section on Tumors will conduct two symposia at the 2008 CNS meeting from Sept. 20 to Sept. 25, 2008.

The first symposium will be an international symposium in the afternoon of Tuesday, Sept. 23, moderated by Alessandro Olivi, MD, from Johns Hopkins University and Rodrigo Ramos Zuniga, MD, from Mexico. The speakers will include Fernando Diaz, MD, PhD (professor, Department of Neurological Surgery, Wayne State University), Edgardo Spagnuolo, MD from Uruguay (member representative of Latin American Federation of Neurosurgery, FLANC), Jose Carlos Saleme, MD (president, Brazilian Society of Neurosurgery), Ramiro del Valle, MD (director, Gamma Knife Surgery, Mexico City), and Alfredo Quinones, MD (assistant professor of neurosurgery, Johns Hopkins). The topics during this symposium will include: (1) "Neurosurgery in Latin America—Current Status," with a special focus on workforce, training of neurosurgeons, universities, government funding, and status of treatment of brain tumors; (2) "Latin American Neurosurgeons in the USA," including a discussion of demographics of the U.S. Spanishspeaking population over time, how many neurosurgeons we have now, and prospects for the future; and (3) "Epidemiology of Brain Tumors and Other Central Nervous System Disease in the Hispanic Population in the USA."

The second symposium, on the morning of Wednesday, Sept. 24, will be "Evaluating Alternatives in the Management of Low Grade Gliomas," moderated by Fred Barker, MD, and Alfredo Quinones, MD. The speakers will be Manfred Westphal, MD, Mark Berenstein, MD, and Michael McDermott, MD. Topics will include the role of surgery in the management of low-grade gliomas as well as long-term efficacy of early versus delayed radiotherapy for low-grade astrocytoma and oligodendroglioma and the prognostic factors for survival in patients with cerebral low-grade gliomas.

We look forward to seeing you during the CNS meeting in September 2008.

CCI Committee Report

Anthony Asher, MD, FACS, Jonas Sheehan, MD, and Russell R. Lonser, MD

The Community Collaborative Initiatives Committee was developed in 2005 to increase the involvement and input of community neurosurgeons in the activities of the AANS/CNS Section on Tumors. Since its inception, the CCI Committee has directed its energies toward the development of a program called the Academic Community Alliance. The ACA was designed to be a network of academic and community practitioners committed to the exchange of information and the optimization of patient care. More specifically, the ACA was developed to open and build strong lines of communication among clinicians from a variety of practice settings with the intent of fostering collaborative activities and ultimately advancing patient care.

To most effectively meet the ACA goals and Tumor Section member objectives, several meetings were conducted recently to solicit input from physicians in a variety of practice settings and to disseminate information about the ACA to interested neuro-oncology practitioners. In September 2007, an ACA open planning session was held at a luncheon meeting during the CNS Annual Meeting in San Diego, Calif. Following that meeting, several hundred individuals representing multiple medical specialties attended an afternoon symposium dedicated to the ACA at the Society for Neuro-Oncology Meeting in Dallas, Texas, in November 2007. Enthusiasm for ACA development and the

desire by community and academic physicians to form collaborative efforts were apparent, as each meeting saw full attendance and active, fruitful discussions. Based on input from these and previous meetings, e-mail dialogue with Tumor Section members and the previously defined ACA objectives, a strategic plan for ACA development was established by the CCI Committee. The ACA

strategic planning process defined near-term goals, including membership development, establishment of an ACA Web site, the identification/promotion of regional areas of cooperation, and strategic partnerships.

Membership Development

To develop a national ACA membership base, the United States was divided into five regions and coordinators were assigned to each (Figure 1). The regions include Northeast, Midwest, Southeast, South/Southwest and West. Todd Vitaz, MD (t.vitaz@louisville.edu), is the ACA national membership coordinator. Gail Rosseau, MD (grosseau@neurosource.com), is the ACA international membership coordinator. ACA membership is open to all neurosurgeons and medical/radiation neuro-oncologists. Interested practitioners can join by simply accessing the ACA Web site (see below) and creating a user account. To date, more than 250 individuals from 13 nations have expressed interest in ACA participation through AANS e-blast communications. Since the launch of the ACA Web site, approximately 125 individuals have formally registered for membership.

Web Site

The ACA was developed to

open and build strong lines

of communication among

clinicians from a variety of

practice settings.

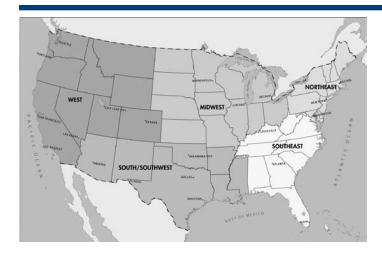
The ACA Web site, developed under the direction of Jonas Sheehan, MD, was launched in November 2007 immediately after the Society for Neuro-Oncology Meeting. The Web site serves as the focal point for the ACA's development, communication, education and informational activities. Because collaboration and education are the overarching goals of the ACA, the Web site was designed to foster interaction among members, provide a platform for education and disseminate information regarding clinical trial opportunities. The site, www.tumorsection.org/aca, is hosted by the Web site of the AANS/CNS Section on Tumors. The ACA Web site provides a mechanism for Web-based communication and permits asynchronous interaction of its members so that they can participate when their individual schedules permit.

The Web site enhances peer-to-peer communication and dissemination of educational information in a number of ways. First, it contains a searchable member database that can be filtered by criteria (e.g. medical discipline, years in practice, location and type of practice). For example, members can search for "medical oncologists" who have been in practice for "five years or more" located in the "Northeast" region in an "academic" practice setting. The list generated by this query includes check boxes next to the names of each member satisfying all of the selected criteria, thereby

allowing the user the opportunity to easily send e-mail to a specific subset of participating members in a single sitting. This feature is specifically designed to facilitate discussion and promote information sharing among members of the ACA. Second, the Clinical Trial section of the Web site provides a list of clinical trials available in neuro-oncology and links ACA members to clinical trial educational

sites. Several large multicenter cooperative trials have been listed in the ACA Endorsed Priority Cooperative Trials, but the goal of the ACA is to populate the directory with member-generated input. Members are encouraged to provide information regarding open clinical trials through the Web site's Add a Clinical Trial feature. Clinical trials may be sorted by Investigator Initiated Trials and Industry Trials. Next, regular educational updates via Select and Quarterly Topic Reviews in Neuro-Oncology are available to simplify the distribution of educational information. Select Topic Reviews are brief summaries of important articles pertinent to the field of neuro-oncology. Quarterly Topic Reviews are more indepth reviews of a general topic in neuro-oncology.

The ACA Web site also offers interactive learning opportunities through the Case of the Month (a case presentation followed by several multiple-choice questions) and the Survey of the Month (a brief survey question). Answers to questions posed in the Case of the Month and Survey of the Month remain anonymous and are tabulated, analyzed and returned to the membership in future Grand Rounds section of the Web site. Members are encouraged to utilize the site's Submit a Case feature to provide suggestions for a future Case of the Month. Finally, the Topic Discussion of the



Month is a forum area where members may open discussions on a topic posed on the ACA Web site.

Regional Areas of Cooperation

ACA regional directors are beginning to identify existing areas of cooperation within each of their regions so that these can be profiled for the entire ACA membership. ACA regional directors will also be searching for opportunities to encourage cooperative activities related to brain tumor care and research by identifying regional brain tumor programs with a large clinical volume and facilitating their outreach to regional colleagues. If you are aware of an existing area of cooperation or participate in a cooperative effort that is a successful example of a community-academic collaboration, please contact your ACA regional membership director so that these types of collaborations can be expanded and/or utilized as a guide to the development of other regional collaborative efforts.

Strategic Partnerships

The ACA leadership recently has worked to develop strategic partnerships with other groups to help accomplish its primary objectives. For example, the National Institute of Neurological Disorders and Stroke has developed an interest in facilitating community participation in clinical research. The ACA has initiated conversations with NINDS administrators to determine how we might work together to foster collaborative research, allow community practitioners greater access to clinical research tools and develop cooperative educational programs. Similar conversations are taking place with other groups, such as the Society for Neuro-Oncology.

By integrating its efforts and taking advantage of the variety of skills and resources brought by community and academic clinicians, the ACA hopes to encourage the dissemination of knowledge related to brain tumor care and to advance medical science, primarily by improving accrual to clinical trials. As the ACA continues to grow as a community of clinicians, it is our hope that we will ultimately be able to improve patient care in neuro-oncology. We sincerely hope you will consider participating in this endeavor. Please do not hesitate to contact the ACA leadership with any questions about this effort.

Anthony Asher, MD, (Co-Director, ACA) asher@cnsa.com Russell R. Lonser, MD, (Co-Director, ACA) lonserr@ninds.nih.gov Jonas Sheehan, MD, (Webmaster, ACA) jsheehan@hmc.psu.edu

Washington Committee Update Isabelle M. Germano, MD, FACS

The Washington Committee recently met twice, on July 19 and Nov. 29, 2007. Both meetings covered multiple important topics, including Medicare physician payment legislation, emergency neurosurgical services and quality improvement. The latter focused on moving forward with a solid plan to institute a data collection program. Topics of specific interest to the Tumor Section are the issues revolving around the Current Procedural Terminology code for radiosurgery (61793).

New technology and more diverse indications for stereotactic radiosurgery have made the present code 61793—stereotactic radiosurgery (particle beam, gamma ray or linear accelerator), one or more sessions—inadequate to describe the full range of procedures and services that are now performed by stereotactic radiosurgery. The previous code 61793—stereotactic radiosurgery (particle beam, gamma ray or linear accelerator), one or more sessions—is worded in a way that was adequate 20 years ago to describe the existing technique of stereotactic radiosurgery but now is confusing to physicians and payers. Under the leadership of Jeff Cozzens, MD, a survey to better document the relative value units of the treatment of each lesion was submitted to neurosurgeons actively performing radiosurgery; the Washington Committee actively participated in creating this list. The preliminary review of this survey suggests that there is evidence supporting the increased relative value units when treating multiple lesions in the same session, but data analysis is needed to corroborate this preliminary impression.

The Joint Guidelines Committee, under the leadership of David Adelson and Mark Linskey, is working on several tumor-related projects, including Metastatic Brain Tumor Multidisciplinary Evidence-Based Clinical and Practice Parameter Guideline Initiatives for Newly Diagnosed GBM.

An additional important topic to the Tumor Section is the American College of Radiology criteria. Although these criteria have been around for nearly a decade, the AANS and CNS recently became aware that the ACR has developed criteria for determining the appropriateness of imaging. The ACR leadership developed these criteria because it concluded that there was an immediate need to develop a system of nationally accepted, scientifically based guidelines to assist radiologists and referring physicians in making appropriate imaging decisions for given patient clinical conditions. The ACR has created a comprehensive list of appropriateness criteria that apply to more than 160 different conditions and various subindications. The list covers essentially the entire field of neurosurgery. The criteria pertinent to tumors are currently been reviewed by selected members of the Tumor Section Executive Committee, and they will provide feedback to the Washington Committee.

New Washington Committee appointees effective Jan. 1, 2008, include Bob Harbaugh, MD, chair, and Gary Bloomgarden, MD, Alan Scarrow, MD, and Alex Valadka, MD, members. Washington Committee members ending service as of Dec. 31, 2007, include Troy Tippett, MD, chair, and Rick Fessler, MD, and Craig Van der Veer, MD, members.

Awards Committee Report

Gene Barnett, MD

The AANS/CNS Section on Tumors presents awards at the spring AANS meeting and at the fall CNS meeting. The Awards Committee continues to be active with nine awards, one research grant award and one combined SNO/Tumor Section award administered through the Tumor Section Awards Committee. Most of the awards are limited to Tumor Section members, providing an additional incentive for membership. The award winners this spring will be recognized in the afternoon of Tuesday, April 29, during the Tumor Section session at the 2008 AANS Annual Meeting in Chicago.

BrainLAB Community Neurosurgery Award

The BrainLAB Community Neurosurgery Award is awarded at the AANS and CNS annual meetings. This award is given to a neurosurgeon with the best abstract related to central nervous system tumors and who practices in a non-academic setting. Award recipients receive \$1,000. Michael McDermott, MD, and Ronald Warnick, MD, were instrumental in securing this award, which is given through the generosity of BrainLAB.

Luciano Mastronardi, MD, received the BrainLAB Community Award at the 2007 CNS Annual Meeting for his presentation, "Utility of Intraoperative MR-Tractography for the Resection of Intracranial Tumors." Alan Villavicencio, MD, will receive the award at the 2008 AANS meeting in Chicago for his paper, "Survival Following Stereotactic Radiosurgery for Newly Diagnosed and Recurrent Glioblastoma Multiforme."

Synthes Skull Base Award

The Synthes Skull Base Award is given to an attending neurosurgeon, resident or fellow in the Tumor Section who submits the best abstract related to skull base surgery. This award, which includes a \$1,000 honorarium, is given at the AANS and CNS annual meetings. Franco DeMonte, MD, chair of the Skull Base Committee, was largely responsible for obtaining this award through a generous contribution from the Synthes Corporation. The recipient at the 2007 CNS meeting was Aghi Manish, MD, for "Management of Recurrent and Refractory Cushing's Disease With Reoperation and/or Proton Radiosurgery: Analysis of a Single Institution Experience." The recipient at the 2008 AANS meeting is Michael Sughrue, MD, for his presentation, "The Natural History of Untreated Acoustic Neuroma."

Farber Award

Sponsored by the Farber Foundation, the Farber Award is presented at the annual meeting of the AANS and the Society for Neuro-Oncology in alternate years. The recipient is selected by the presidents of the two societies and the Tumor Section awards chair based on nominations from the executive committees of both societies. The award, which is given only once to a recipient, recognizes the most promising investigators who are achieving significant results early in their careers. The Farber awardee receives a \$5,000 honorarium and speaks at both the AANS and SNO meetings.

continued on page 11

Awards Presented at the 2007 CNS Annual Meeting



Michael W. McDermott, MD (left) and Randy Jensen, MD, recipient of the 2007 CNS Mahaley Clinical Research Award.



Gene Barnett, MD (left) and Daniel Cahill, MD, recipient of the 2007 Preuss Award.

Gene Barnett, MD

(left) and Jose Valerio,

MD, recipient of the

Tumor Foundation

Young Investigator

Award.

2007 American Brain



Gene Barnett, MD (left) and Aghi Manish, MD, recipient of the Synthes Skull Base Award.



Michael W. McDermott, MD (left) and Stephen Skirboll, MD, recipient of the 2007 National Brain Tumor Foundation Translational Research Award.



Luciano Mastronardi, MD (left), recipient of the BrainLAB Community Award, and Gene Barnett, MD.



Michael W. McDermott, MD (left) and Martin Baggenstos, MD, recipient of the 2007 Integra Foundation Award.



There is a new selection process for the Farber award. In the new process, Mr. Farber will be directly involved in the final selection after nominations by the executive committee and review by the leadership of the Tumor Section and Society for Neuro-Oncology.

The 2007 Farber Award and lecture were presented at the AANS meeting in Washington, D.C., to Paul Mischel, MD, from UCLA. Dr. Mischel's career in neuro-oncology research has led to numerous important contributions in quantitative analysis of signal transduction pathways, stem-cell related pathways and gene expression networks in clinical samples. His presentation focused on his work with prediction of tumor response to EGFR inhibitors.

The 2008 Farber Award winner is Antonio Chiocca, MD. Dr. Chiocca is widely regarded as a "thought leader" in the field of neuro-oncology and has directed key laboratory and clinical research, particularly focused on the use of viral therapies for malignant gliomas. His presentation will be on Tuesday, April 29, in Chicago.

NBTF Translational Research Award

The National Brain Tumor Foundation awards the National Brain Tumor Translational Research Award for the best translational research grant proposal submitted by the end of May each year. The winner is announced at the CNS annual meeting. Through the efforts of Michael McDermott, MD, and Rob Tufel from the NBTF, the funding for this grant increased from \$15,000 to \$50,000 per award beginning in 2007.

This year's proposals were reviewed by a subgroup of the Tumor Section's Executive Committee. The 2007 winner was Stephen Skirboll, MD, of Stanford University for his paper, "The Colony-Forming Antibody Cell Array: A Novel Screening Strategy to Further Identify Cancer Stem Cells in Human Malignant Gliomas."

Preuss Award

The Preuss Award, sponsored by the Preuss Foundation, is given at each AANS and CNS meeting to a young scientist investigating brain tumors, within 10 years of training, who has submitted the best basic science research paper. The award includes a \$1,000 honorarium.

The 2007 Preuss awardee was Daniel Cahill, MD, from Massachusetts General Hospital for his presentation entitled, "Loss of Mismatch Repair Protein MSH6 in Human Glioblastoma Is Associated With Tumor Progression During Temozolomide Treatment." The 2008 AANS meeting winner is John K. Park, MD, of the National Institute of Neurological Disorders and Stroke for his presentation, "Interleukin-13 Receptor Alpha2 Expression in Glioblastoma Multiforme."

Mahaley Award

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

The 2007 CNS Mahaley Clinical Research Award recipient was Randy Jensen, MD, from the University of Utah for his presentation entitled, "Outcomes of Patients With Brain Metastases for Melanoma and Renal Cell Carcinoma Primarily Managed With

Stereotactic Radiosurgery." At the 2008 AANS meeting, the award will be presented to Andrew Parsa, MD, PhD, from MD Anderson for his paper, "Prolific CD8 T Cell Infiltrate in Newly Diagnosed Glioblastoma Patients Correlates With Long-Term Survival."

American Brain Tumor Foundation Young Investigator Award

Sponsored by the American Brain Tumor Foundation, 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 less than six years. A \$2,000 honorarium accompanies this award.

The CNS 2007 recipient of the Young Investigator Award was Jose Valerio, MD, from Cleveland Clinic for his abstract, "Gliomaspecific Sequence-independent Toxicity of Small Interfering Double-stranded RNA Molecules." The 2008 AANS recipient is Ichiro Nakano, MD, PhD, for his abstract entitled, "Identification of Inhibitor for Brain Tumor Stem Cells."

Integra Foundation Award

The Integra Foundation Award, sponsored by the Integra Foundation, is given at each AANS and CNS meeting for the best research or clinical paper investigating benign brain, spinal or peripheral nerve tumors. There is a monetary award of \$1,000.

At the 2007 CNS meeting the recipient was Martin Baggenstos, MD, of George Washington University for his paper, "Mechanisms of Morbid Hearing Loss Associated With Tumors of the Endolymphatic Sac in von Hippel-Lindau Disease." At the 2008 AANS meeting, the winner is Joung Lee, MD, for his presentation, "Operative Outcome Following Meningioma Surgery: A Single Surgeon's Experience With 600 Cases."

Journal of Neuro-Oncology Award

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

This year's recipient, Raymond Sawaya, MD, will receive the award at the 2008 AANS meeting for his paper, "Impact of Surgery on the Leptomeningeal Dissemination of Supratentorial Brain Metastasis."

Ronald Bittner Award

The Ronald Bittner Award is endowed by Mrs. E. Laurie Bittner in memory of her husband, Ronald L. Bittner, MD. It is presented for the best abstract on brain tumor research submitted by a resident or junior faculty member to the AANS meeting. This award includes a \$500 honorarium and \$1,000 traveling scholarship.

The 2007 Bittner Lecturer was Matthew J. McGirt, MD, for "Extent of Surgical Resection Is Independently Associated With Survival in Patients With Malignant and Low-Grade Brain Astrocytoma." The Bittner lecturer for the upcoming 2008 AANS meeting will be Eric Holland, MD.

continued on page 13

Tumor Section/BrainLAB International Research Fellowship Awarded

Frederick F. Lang, MD

In the second round of competition for the AANS/CNS Section on Tumors/BrainLAB International Research Fellowship, completed in January, the Scientific Review Committee awarded this year's fellowship to Xiang Wang, MD, of China for his proposal, "The Trafficking of Bone Marrow Derived Mesenchymal Stem Cells in Brain Tumor Angiogenesis and Stromal Development." Dr. Wang will carry out his research in the laboratory of Victor C.K. Tse, MD, PhD, at Stanford University, who is a member of the Tumor Section. The fellowship will provide Dr. Wang with a stipend of \$50,000 for travel expenses and salary support for July 2008 to June 2009.

The AANS/CNS Section on Tumors/BrainLAB International Research Fellowship was started in 2006 in an effort to develop a program for neurosurgeons from outside North America to come to the United States for the specific purpose of undertaking research in neurosurgical oncology. BrainLAB AG, a Germany-based company that develops surgical image-guidance systems, has funded the fellowship for the past two years through an educational grant. Applications for this second round of funding were due on Nov. 15, 2007. More than 15 grants were received from neurosurgeons from eight different countries, including Brazil, Honduras, India, Iran, Italy, Japan, Nigeria, and Turkey. The application required a five-page proposal outlining the purpose and methods of the research, an essay describing the importance of the fellowship in the applicant's career, and letters of recommendation. A letter of support from a sponsor in the United States, who had to be a Tumor Section member, was also required. All the proposals were reviewed independently by the Scientific Review Committee, which consisted of six members from the Tumor Section Executive Committee. Dr. Wang's proposal was

Skull Base Surgery Subcommittee Report Franco DeMonte, MD

As chair of the Skull Base Surgery Subcommittee of the Tumor Section and president of the North American Skull Base Society, I extend my personal invitation to you to join us at the 19th annual meeting of the North American Skull Base Society that will be held in conjunction with the 5th World Federation of Skull Base Societies meeting in Vancouver, Canada, in September 2008. The premeeting practical courses will be held on Tuesday, Sept. 9 and Wednesday, Sept. 10. There will be full-day clinics on endoscopic and open skull base techniques and two half-day courses on 3-D skull base anatomy given by Al Rhoton, MD. The meeting will follow and will run from Thursday, Sept. 11, to noon on Sunday, Sept. 14. Information regarding this meeting and other upcoming meetings of the NASBS can be found at www.nasbs.org.

If I can be of any assistance to any of our membership please contact me at fdemonte@mdanderson.org

selected from an outstanding group of applications that covered a broad range of topics in neurosurgical oncology.

Last year's inaugural awardee, Kazuhiko Kurozumi, MD, from Okayama, Japan, is currently working at The Ohio State University in the laboratory of Antonio Chiocca, MD, PhD. Dr. Kurozumi's project focuses on modulating the glioma extracellular matrix in order to enhance oncolytic viral therapy. So far Dr. Kurozumi has used his fellowship to great advantage, as he recently published a paper, "Effect of Tumor Micro-environment Modulation on the Efficacy of Oncolytic Virus Therapy," in the *Journal of the National Cancer Institute* (JNCI 99:1768–81, 2007). Dr. Kurozumi acknowledged the Tumor Section /BrainLAB International Research Fellowship for its financial support of this work. Dr. Kurozumi will complete his fellowship in June 2008.

The Tumor Section thanks all those who have worked so hard to keep this fellowship successful. In particular, special thanks go to Julie Quattrocchi and Michele Gregory, who have played critical administrative roles in overseeing the application process. The Tumor Section remains grateful to BrainLAB AG for its generous financial support. It is anticipated that enthusiasm for the fellowship will continue to grow and thereby provide opportunity for collaboration between members of the Tumor Section and outstanding neurosurgeons from around the world.

Applications for next year's award are due on Nov. 17, 2008. Interested neurosurgeons can obtain applications and details about the submission process through the Tumor Section Web site, by contacting Julie Quattrocchi by e-mail (jaq@aans.org), or by writing to AANS, 5550 Meadowbrook Drive, Rolling Meadows, IL 60008-3852 USA.

Treasurer's Report

Jeffrey N. Bruce, MD

The Tumor Section remains fiscally sound following the highly successful 2007 CNS Annual Meeting in San Diego. A number of organizations have been generous in their support of our academic mission by supporting grants and awards. We are particularly indebted to support from the American Brain Tumor Foundation, Synthes CMF, the Integra Foundation, BrainLAB, the Bittner Family Foundation, the National Brain Tumor Foundation, the Preuss Foundation, the *Journal of Neuro-Oncology* and the Farber Foundation.

The Tumor Section supports numerous initiatives including the section Web site, brain metastasis guideline project, international travel stipends, sponsorship of the future meningioma meeting in Boston, the Academic Community Alliance and the Washington Committee. Sources of revenue include membership dues, income from past satellite meetings and investment earnings which are proficiently overseen by the AANS Executive Office.

AANS Online Case Studies

Bob S. Carter, MD, PhD

The AANS recently posted 32 case studies including 10 tumor cases to www.MyAANS.org. Other cases cover vascular, pediatric, spine and functional topics. These cases, free to AANS members, represent an interactive educational experience driven by case contributions from neurosurgeons.

The AANS Online Case Study project, a project of the Information Technology Committee, is an interactive repository for neurosurgical cases that is not limited to viewing an article or abstract. The repository offers a comment function that encourages members to interact with each other in a secure and confidential environment. Because viewers' comments are posted almost immediately, colleagues around the world have the option of gathering online to review a case and "discuss" it, or viewing it and adding to cumulative commentary over time.

This discussion fosters a peer-to-peer learning experience, giving neurosurgeons and residents the opportunity to describe how they have managed a similar case or offer insights into other aspects of case presentation or pathophysiology. Another quality that makes the Online Case Study project valuable is its broad appeal. Cases can be submitted by residents, those in early practice or board-certified members. Medical students or interns may also submit cases, under the supervision of a resident or neurosurgeon.

The cases vary in complexity and content so that as the repository grows, every neurosurgeon will be able find a case relating to his or her specialty and experience.

Submitting Cases

Cases are submitted online at www.MyAANS.org. The cases may be prepared in advance and then posted, or posted by entering content directly online. The submission tool will feel familiar to anyone with experience using presentation software such as PowerPoint or word processing programs. Case submitters are encouraged to enhance the case presentation with audio and video. Files types accepted include:

- Audio (MP3, WMA, WAV)
- Video (AVI, MPEG)
- MS Office (e.g., PPT, DOC)
- Universal formats (TXT, PDF).

The case submitter can develop the case presentation in multiple sessions, coming back to it as time allows and completing all of the editing before submitting the final version for review. The case submitter then can check the status of the submission in the "my cases" section of the site.

Reviewing and Posting Cases

The Online Case Study project editor receives each case submission and then assigns the case to one or more reviewers based on the educational content. The reviewers assess the case and recommend whether or not it should be posted. If a favorable review is received, the editor posts the case

for viewing. The editor and all reviewers are board-certified neurosurgeon members of the AANS.

Viewing the Online Cases

To view online cases, the user logs in at www.MyAANS. org and selects "Online Case Studies" from the left-hand navigation toolbar. A featured case appears at the top. Viewers can select how they want to view the remainder of the cases by sorting them chronologically or by subject. A title search feature also is available.

After selecting the case, the viewer sees a screen with the case description at the top, supplemental material such as audio, video or slides to the right, and viewer comments below. A significant amount of information is provided in the "Help" section to assist viewers with questions about all parts of the process.

Feedback

As members explore the cases, they are encouraged to send their comments and suggestions to Bob Carter, MD, PhD, bcarter@partners.org. Board-certified neurosurgeons interested in serving as case reviewers also should contact Dr. Carter. .

To better represent the variation in disease presentation and management within neurosurgical practice, more cases need to be submitted. Please log in to www.MyAANS.org to view the cases or to submit additional tumor cases.

Awards Committee Report continued from page 11

American Brain Tumor Association Clinical Research Award

The American Brain Tumor Association Clinical Research Award is a new \$50,000 grant designed to support faculty who are involved in clinical research. The award is designed to provide pilot clinical data by the end of the one-year funding period for research having direct clinical application. Awards are designed to strengthen applications for permanent outside funding. Applicants must be full-time neurosurgeons who are members of the AANS/CNS Section on Tumors. Grant application forms are available from the ABTA, or from the Tumor Section. Applicants will be expected to provide evidence of clinical trial expertise, a well-designed hypothesis and clinical research plan along with any relevant supporting preliminary data, internal review board approval for the proposed study, eligibility criteria and a plan for subject accrual, and a timetable for completion of the clinical trial. Multicenter collaborations are permitted. The successful grant applicant will be chosen after a peer-review process conducted by members of the Tumor Section Executive Committee. The scientific merit of the proposed study, the credentials of the applicant and the support of the institution are important factors. Proposals are due by Jan. 15 of each year, and the grant is awarded on March 1 as well as announced at each AANS annual meeting.

Immunotherapy Task Force Report

Roberta Glick, MD

In recent years there has been increased interest in the development of immunologic strategies for the treatment of brain tumors. It is evident by the many questions, inquiries and contacts from patients, physicians, and neurosurgeons that there is an urgent need to coordinate and disseminate the current information and ongoing research in this field. Even within the scientific community, many do not know what current studies are under way, the results of ongoing trials, which immune parameters should be monitored in these clinical trials, whether these studies should be multicenter trials, and what further preclinical work needs to be done.

Several researchers and clinicians involved in neuro-oncology thought this need could be met via a focused research group. To this end, we have organized an international multidisciplinary group, an Immunotherapy Task Force, as a kind of "neural environment" to facilitate communication among researchers, both basic science and clinical, and to coordinate multicenter collaborative research efforts. It is a grass-roots group in that everyone is invited to join and participate. The members include both clinical physicians (neurosurgeons, neurologists, pathologists, radiation therapists) and basic scientists working in the field of neuro-oncology. Since the initiation of this group in 2000, it has grown to more than 75 members.

We organized this Immunotherapy Task Force to bring people in the field together for purposes of education and research, and to evaluate the need for an immunotherapy consortium. The meetings are organized into three parts: invited lecturer (previous lecturers have included Darell Bigner, MD, and Edward Oldfield, MD), research talks (oral presentations), and an informal time for networking.

The goal of these meetings are threefold:

- to present and evaluate the novel and current laboratory and clinical research in the field of brain tumor immunotherapy in order to coordinate and disseminate current information and ongoing research in the field;
- to try to come to a consensus regarding what clinical end points and immune system monitoring parameters should be evaluated in clinical studies; and
- to develop relationships and collaborative efforts for conducting multicenter trials.

As a result of the growing interest and promising early results in this exciting and changing field, a special issue of the *Journal of Neuro-Oncology* was dedicated to clinical and basic research in brain tumor immunotherapy. The articles in this issue represented many of the leading researchers in the field of brain tumor immunotherapy, most of whom are members of the Immunotherapy Task Force. The issue was dedicated to one of our great past teachers, Steven Mahaley, MD.

Sixth Annual Meeting of the Immunotherapy Task Force

The Sixth Annual Meeting of the Immunotherapy Task Force was held in Dallas, Texas, on Nov. 17, 2007, and it was cosponsored by the Tumor Section and Society of Neuro-Oncology. More than 100 people attended the meeting, which included 14 oral presentations and a new poster session with 30 poster presentations. Amy Heimberger, MD, arranged for Drew Pardoll, MD, from Johns Hopkins to be our invited lecturer. His topic was an inspiring talk on "New Frontiers."

As a result of the audience's desire to further discuss immunotherapy research, Kevin Lillehei, MD, has organized a yearly Brain Tumor Immunotherapy Symposium at the Givens Institute in Aspen, Colorado, in August. This effort has given researchers and clinicians an extended time for further discussion and collaboration, in a casual and beautiful environment. This meeting is also sponsored by the Tumor Section.

We want to thank the AANS/CNS Section on Tumors and Society of Neuro-Oncology for their continued support of these unique clinical and basic science focused research efforts. Anyone interested in the field or interested in attending the next Immunotherapy Task Force meeting is welcome to contact Roberta Glick, MD, rpglick@hotmail.com.

Radiosurgery Committee Report Bruce Pollock, MD

The Radiosurgery Committee was formed to represent the Tumor Section in areas related to stereotactic radiosurgery. Significant activities have included participation in the AANS/ CNS Washington Committee's SRS Task Force, which developed the current definition of SRS in conjunction with the leadership of the American Society for Therapeutic Radiology and Oncology in March 2006 (1).

The Radiosurgery Committee's current focus is to support the Washington Committee in the potential modification of Current Procedural Terminology code 61793, to maintain the role of neurosurgeons in this procedure and to determine whether new CPT codes might be created that are more appropriate considering changes in SRS over the past decade. A physician work survey based on the Relative Value Update Committee model was circulated in fall 2007, and data is being analyzed. Recommendations based on this survey will be used to submit a coding change proposal for SRS in the future.

1. Barnett GH, Linskey ME, Adler JR, Cozzens JW, Friedman WA, Heilbrun MP, Lunsford LD, Schulder M, Sloan AE, The American Association of Neurological Surgeons/Congress of Neurological Surgeons Washington Subcommittee Stereotactic Radiosurgery Task Force: Stereotactic radiosurgery—an organized neurosurgery-sanctioned definition. J Neurosurg 106:1–5, 2007.

Journal of Neuro-Oncology: Editors' Message

Linda M. Liau, MD, PhD, and Webster K. Cavenee, PhD

This year marks a time of change for the *Journal of Neuro-Oncology*. After many years of dedicated service, Joseph Piepmeier, MD, has resigned his position as editor. Joe did a superb job in that role, and we are sure you join us in saluting and thanking him. His are large shoes to fill, but we are committed to the job.

In 2008, the *Journal of Neuro-Oncology* has a new cover look. We will be revamping the list of Editorial Board members and reviewers and actively seeking the participation of members of the AANS/CNS Section on Tumors. This year we will publish supplemental issues covering the guidelines efforts for newly diagnosed glioblastoma and metastatic brain tumors.

It is an auspicious time to offer a few observations. The first observation is that the field of neuro-oncology is a noble endeavor. All of us, in one way or another, are dedicated to understanding the causes and treatments for nervous system tumors that impact the well-being of the patients they afflict. Many of these tumors are among the most recalcitrant and lethal of human malignancies. The second observation is that this field is one of the most interactive, multidisciplinary ones in oncology. We frequently see papers coauthored by neurosurgeons, neuropathologists, neuro-oncologists and basic scientists, as well as similar breadth reflected in the

registrants at neuro-oncology meetings. This range of professionals brings a richness, rigor and focus to these overridingly important problems.

We are committed to making the *Journal of Neuro-Oncology* a home for the best discoveries in all areas of neuro-oncology investigation. Our goal is to continue to increase the visibility and quality of the journal so that it can continue as the flagship publication for communicating results of vital importance in this area for Tumor Section members. We cannot, however, do this alone. We will need the active participation and ownership of the Tumor Section to achieve success. This means that we will ask for your best papers, your thoughtful and constructive reviews when possible, and your agreement to serve on the Editorial Board as appropriate. We ask you to embrace the journal as your vehicle for sharing the results of your studies with the community. To this end, subscriptions to the *Journal of Neuro-Oncology* will now be included as an integral part of Tumor Section membership.

Together, we will ensure that the *Journal of Neuro-Oncology* is a superb representative of our field. We look forward to working with you!

Clinical Research Committee Report

Michael Vogelbaum, MD, PhD

While multiple small grants from a variety of brain tumor research funding agencies are available to support basic science and translational research, there are few such grants dedicated to the support of early stage clinical research. In late 2007, the Clinical Research Committee of the AANS/CNS Section on Tumors, in joint sponsorship with the American Brain Tumor Association, introduced a new clinical award, the ABTA Clinical Research Grant. This one-year grant of \$50,000 was designed to provide support for pilot clinical research activities that potentially could lead to the development of a larger, multiyear clinical trial supported by federal funding.

Applicants were asked to provide evidence of clinical trial expertise, a well-designed hypothesis and clinical research plan along with any relevant supporting preliminary data, internal review board approval for the proposed study, eligibility criteria and a plan for subject accrual, and a timetable for completion of the clinical trial. Multicenter collaborations were permitted. The application deadline was Jan. 15, 2008; seven applications were received and are currently under peer review. We anticipate that the recipient will be announced prior to the 2008 AANS Annual Meeting. It is anticipated that the ABTA Clinical Research Grant will be awarded annually.

The Tumor Section also continues to have a strong presence within the Radiation Therapy Oncology Group, a cooperative research group funded by the National Cancer Institute, which has the largest and most active brain tumor clinical trial portfolio of any of the cooperative groups. The Neurosurgery Subcommittee of the Brain Tumor Committee has more than six neurosurgeon-led trial concepts in various stages of development. These new concepts include trials of the combination of 06-BG and Gliadel for recurrent glioblastoma multiforme (letter of intent has been accepted by Cancer Therapy Evaluation Program), stereotactic radiosurgery for refractory acromegaly, IMRT for recurrent or high-grade meningioma, specialized MRI-guided stereotactic radiosurgery for recurrent GBM and a vaccine therapy for recurrent GBM (letter of intent is under review by the Cancer Therapy Evaluation Program).

A clinical research educational program to be made available at the annual AANS and CNS meetings is under development. The program will identify experienced clinical scientist neurosurgeons willing to serve as mentors for young neurosurgeons interested in pursuing clinical research and to develop support for the inclusion of basic clinical research concepts in the formal requirements for neurosurgery training.

AANS/CNS Section on Tumors

5550 Meadowbrook Drive Rolling Meadows, Illinois 60008-3852 Non-Profit Org. U.S. Postage PAID American Association of Neurological Surgeons

AANS/CNS Section on Tumors Leadership 2007–2009

ACIL	S/CINS SECTION ON TO	imors Leadership 2007–2009	
Chair	M. McDermott	Scotland	M. Eljamel
Secretary Treasurer	J. Bruce	England	N. Mukerji
Advisory Board	W. Couldwell, Chair	Finland	A. Sandmair
	M. Bernstein	Germany	P. Emami
	P. Black	Switzerland	D. Cordier
	R. Glick	Italy	F. DiMeco
	J. Olsen	Journal of Neuro-Oncology	L. Liau
	N. Oyesiku	Society of Neuro-Oncology	S. Chang
	J. Piepmeier	Membership	J. Sheehan
	M. Rosenblum	Newsletter	A. Sloan
	J. Rutka	Nominating	R. Warnick
	R. Sawaya	Programs	
	M. Westphal	2007 CNS	H. Weiner
Subcommittees	•	2008 AANS	K. Aziz
Awards	G. Barnett	2008 CNS	A. Quinones
Bylaws	A. Chiocca	2009 AANS	M. Aghi
Community Collaborative	T. Ascher	Radiosurgery	B. Pollock
Initiatives	R. Lonser	Research	
Education		Basic & Translational	D. O'Rourke
AANS & CNS Practical Courses	A. Parsa	Clinical Trials	M. Vogelbaum
Fellowship Training	F. Lang	Immunotherapy Task Force	A. Heimberger
Guidelines	M. Linskey	Satellite Symposium 2009	R. Jensen
	S. Kalkanis	Skull Base Surgery	F. DeMonte
History	F. Barker	Spinal Oncology	M. Bilsky
International		Washington Committee	I. Germano
Argentina	A. Rabadan	World Federation of Neurosurgical	M. Johnson
Chile	E. Conchas	Societies	
Japan	F. Yamaguchi	Young Neurosurgeons	J. Jagannathan