

Editor: Linda Liau, MD, PhD

SECTOR SECTOR

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Chairman's Message

What is the Section on Tumors Doing for You and Your Practice?



the benefits of being a member of the Section on Tumors. This type of query offers me the opportunity to describe how the Section on Tumors can contribute to your professional growth and clinical practice. So

I am often asked about

how can you take advantage of these member benefits?

Continuing Medical Education

The Section on Tumors offers numerous tumorspecific *practical courses and seminars* at both the AANS and CNS Annual Meetings (28 offerings in 2006 alone). If you want to brushup on the entire field of neuro-oncology in one day, take "Update on Tumors for the General Neurosurgeon" at the AANS Annual Meeting or "Practical Update on Brain Tumors" at the CNS Annual Meeting. These essentially identical courses cover nearly all aspects of neuro-oncology from diagnosis to treatment in a practical format that easily translates to any type of practice.

Interested in a more in-depth presentation and interactive setting? Then join us for the Seventh Biennial Tumor Satellite Symposium on Friday and Saturday, April 13-14, 2007 in Washington, D.C., just prior to the 2007 AANS Annual Meeting. The Satellite Symposium will offer an exciting scientific program including over 70 oral and poster presentations and special features such as: 1) An international symposium; 2) Case presentations by community neurosurgeons; 3) A career development session; and 4) A clinical research seminar. A new practical course, "Local Delivery Methods for Adjuvant Treatment of Malignant Gliomas", directed by Section on Tumors faculty members will take place on Sunday, April 15, 2007 as part of the AANS

Annual Meeting. For more information on the upcoming Tumor Satellite Symposium, visit the new Section on Tumors Web site at www. tumorsection.org.

You can keep up-to-date on a monthly basis by subscribing to the *Journal of Neuro-Oncology* (Section on Tumor members receive a 60 percent discount). This is a multidisciplinary journal that provides a single forum for communication among neurosurgeons, radiation oncologists, and neuro-oncologists. By reading this one journal, you can avoid scanning dozens of journals to stay abreast of the field. Several new features were added: 1) Images in Neuro-Oncology, 2) Editor's Invited Reports, and 3) Special supplements on topics such as, "Cortical and Subcortical Mapping for Resection of Low Grade Gliomas". You can find a link to the online version of the *Journal of Neuro-Oncology* at www.tumorsection.org/links/.

Practice Management Tools

Enhance your *patient education* offerings by purchasing, "A Patient's Guide to Brain Tumors". This brochure, developed by the Section on Tumors and the AANS, describes the various types of brain tumors, types of diagnostic testing, treatment options, and the role of the neurosurgeon. This pamphlet can be an invaluable adjunct to your office discussions with brain tumor patients and can be found at the AANS Online Marketplace (http://marketplace. aans.org). Our new Section Web site also has several patient resources as well as links to all patient support organizations.

Clinical practice guidelines can help you make appropriate decisions for individual brain tumor patients when combined with your professional experience and judgment. The Section on Tumors is hard at work on several new AANS/CNS-endorsed guidelines projects that should be available in the near future to enhance

Chairman's Message continued from front page

your practice of neuro-oncology including: 1) Malignant gliomas; 2) Pituitary adenomas; and 3) Metastatic brain tumors. In the meantime, you can access several brain tumor practice guidelines endorsed by other national and international organizations in the Members Section of our new Web site (www.tumor.section.org, username "tumor", password "section").

The Section on Tumors also helps *protect your practice* by raising awareness of the subspecialty and the essential role that neurosurgeons play in the multidisciplinary care of brain tumor patients. For example, the Section on Tumors worked closely with the leadership of the AANS and CNS to forge an agreement with American Society for Therapeutic Radiology and Oncology that defines stereotactic radiosurgery and preserves the role of the neurosurgeon as an integral part of the patient care team. Without this type of "behind-the-scenes" work on your behalf, your practice may be shaped by other specialty organizations and the government.

New technology and treatment strategies require *new CPT codes* so that you will be appropriately reimbursed for your surgical work and innovation. The Section has responded to the emerging field of convection-enhanced delivery by working with the AANS and CNS to secure approval for a new category III code for stereotactic placement of infusion catheters. You can stay abreast of new coding and reimbursement strategies by visiting our Web site at www.tumorsection.org/news/washington.htm.

Interaction with Neuro-Oncology Colleagues

Whether you perform one brain tumor operation per month, or several per week, from time-to-time you will seek guidance from one of your neuro-oncology colleagues. This may take place over the phone, by email or at a national meeting. The Section on Tumors has recognized the importance of the free exchange of ideas and knowledge among colleagues by forming the Academic Community Alliance (ACA). The primary objective is to encourage collaborative activities between individuals in different practice settings with the intent of advancing patient care. There will be a dedicated part of the new Section Web site to include: 1) A list of ACA members; 2) Industry trials that are actively soliciting research sites; 3) Institutions that seek a collaborative relationship (e.g., tissue sharing, multi-center trials); and 4) A forum to allow communication between members regarding clinical questions, case reviews/discussion, and meeting information. There will also be regular ACA e-blasts that will feature ACA news, select reviews of neuro-oncology topics, and special commentary. Please access the Section Web site in coming months to become an ACA participant and benefit from this exciting new level of interaction among colleagues.

I hope that I have convinced you that the Section on Tumors can help you achieve your personal, professional and practice goals. I encourage you to take advantage of the full spectrum of member benefits that will surely transform you and your practice. If you have any questions, or suggestions for new member benefits, please e-mail me at: nsgymd@mac.com.

Treasurer's Report

The 2006 AANS Annual Meeting in San Francisco was another great success for the Section on Tumors. Financial support for Section awards and ongoing administrative/membership meetings was outstanding. The Section on Tumors wishes to thank Baxter, Integra, Synthes, Stryker, and the *Journal of Neuro-oncology* for their support of Section executive and membership activities during this recent meeting. In addition, the Section would like to thank its regular supporters of scientific awards and grants including the National Brain Tumor Foundation, the Farber Foundation, the Preuss Foundation, the American Brain Tumor Association, the *Journal of Neuro-oncology*, the Integra Foundation, and the Ronald L. Bittner Foundation.

Overall, the financial status of the Section on Tumors is sound. This past year, additional funds were spent on a membership drive and development of a new Web site. Both successful efforts remained on budget and were regarded as necessary investments for our future as a strong and visible organization. The overall balance sheet remains stable in comparison to past years. This coming year, the Section will be preparing for a Tumor Satellite meeting prior to the AANS Annual Meeting in Washington, D.C. Dr. Ronald Warnick, Dr. Michael McDermott, and Mr. Ronald Engelbreit from AANS have discussed the proposed budget for 2007. A final budget for the Tumor Satellite Meeting and the second quarter financials will be presented at the Executive Committee and General Membership meetings at the CNS Annual Meeting in Chicago. Please feel free to contact me directly if you have any questions (mwmcd57@comcast.net).

Michael W. McDermott, MD

Skull Base Subcommittee Report

Congratulations to Theodore H. Schwartz, MD and Vijay K. Anand, MD for being the first recipients of the Synthes Skull Base Award for their abstract, "Endoscopic, endonasal, extended transsphenoidal, transplanum, transtuberculum approach for resection of suprasellar lesions." The awardwinning abstract will be presented on Monday, October 9 at the 2006 CNS Annual Meeting in Chicago.

The 18th North American Skull Base Society Annual Meeting will be held May 24-27, 2007 in Chicago. The meeting theme is "Innovation, Teamwork, and Excellence in Skull Base Surgery." The call for abstracts will go out in September 2006.

For several years now, the North American Skull Base Society has been sponsoring a "Senior Resident's Course" held annually in August at the Medical Education and Research Institute in Memphis, Tenn. This year's course will be held on August 25-28, 2007. Program directors should identify interested chief residents for this exciting course.

Franco DeMonte, MD

Tumor Section Community Collaborative Initiative



Recently, the Section on Tumors created a new program, the Community Collaborative Initiative (CCI) to encourage and facilitate the involvement of community physicians in Section activities. This program seeks to accomplish the following objectives:

- 1) To make the content of educational and scientific programs more relevant to the community neurosurgeon.
- 2) To create informational and consultative member services to enhance the care of brain tumor patients in community settings.
- To promote the involvement of community physicians in original scientific efforts.
- 4) To promote the development of collaborative communityacademic efforts to enhance patient care and facilitate brain tumor-related research.

With respect to the first objective, the CCI Committee will be working with the Section on Tumors membership services and scientific program committees to encourage community neurosurgeon involvement in future educational efforts, such as satellite symposia and annual meeting programs. By soliciting input from community practitioners, educational programs can be made more relevant to community-based individual practices. This work was initiated in the planning of the 2006 Congress of Neurological Surgeons (CNS) Annual Meeting.

With respect to the other objectives, the Section on Tumors recently reviewed and approved the development of the Academic Community Alliance (ACA), sponsored by the Section. Individuals in almost all practice settings have the potential, based on the skills and resources at their disposal, to make unique contributions to patient care (and possibly the evolution of treatment paradigms) and ACA activities will be based on that principle. The primary objective will be to encourage collaborative activities between individuals in different practice settings to advance patient care.

The CCI Committee envisions the ACA as a network of academic and community practitioners (as opposed to institutions) committed to information exchange and care optimization. The CCI Committee has proposed the creation of an initial network of 20-40 individuals from centers around the country for a pilot project. The initial ACA membership would be evenly split between academic and community sites. The first activities of the ACA would revolve around organizational and educational goals including:

- 1) The development of a strategic plan for the ACA.
- 2) The development of a listserv to support communication within the network.
- The dissemination of information relevant to current treatment strategies for brain tumors including new clinical protocols and summaries of current literature.

A key objective of the ACA will be to build strong lines of communication between individuals in different practice settings. By creating a setting in which the knowledge and skills of all members are appreciated and respected, it may be possible to enhance individual educational experiences, promote current treatment strategies, enhance patient care, and break down barriers that have traditionally prevented interaction between practitioners in community and academic settings. At a minimum, the CCI Committee believes that working together, several progressive university and community programs could support more standardized treatment, promote awareness of current literature, and encourage involvement in clinical trials.

The CCI Committee is developing a membership base for the ACA, along with a Web-based communications system through the new Section on Tumors Web site. If you are a community-based practitioner who would be interested in participating in the ACA and/or the development of our educational programs, please feel free to contact me regarding these programs. Note that an organizational luncheon meeting for the ACA will take place at the CNS Annual Meeting on Monday, October 9, 2006 at McCormick Place Convention Center in Chicago. Details regarding the exact meeting location and time will be forwarded to all members of the Section on Tumors prior to the meeting.

The Section on Tumors is committed to serving the needs of surgical neuro-oncologists in all practice settings. We are excited about the creation of these programs, and we encourage your participation and feedback (asher@cnsa.com).

Anthony Asher, MD, FACS

Society for Neuro-Oncology (SNO) Update



Despite enthusiasm to pursue a Society of Neuro-Oncology (SNO)/Section on Tumors meeting, this will not occur in 2006 due to logistical reasons. The 2006 Annual SNO meeting will be held in Orlando, Fla. on November 16-19, 2006. A mini-

immunotherapy symposium is being planned by Roberta Glick, MD and will be hosted by the AANS/CNS Section on Tumors.

A plan to hold a Section on Tumors meeting in conjunction with a World Federation of Neuro-Oncology meeting will be reviewed.

An initial version of *Guidelines for Neuro-Oncology Standards for Investigational Studies (GNOSIS)* pertaining to surgicallybased therapeutic trials was drafted by Susan Chang, MD and Mike Vogelbaum, MD, PhD. Members of the Section on Tumors contributed information specific to their area of expertise as an appendix that will be submitted for publication on behalf of the Section.

Susan M. Chang, MD

Section on Tumors Establishes New International Research Fellowship

The AANS/CNS Section on Tumors is pleased to announce the establishment of a new international research fellowship program called the "Section on Tumors/BrainLAB International Research Fellowship." This name recognizes the partnering of the Section on Tumors with BrainLAB AG, who provide financial backing for this program.

Current Chairman of the Section on Tumors, Ronald Warnick, MD, conceptualized the international research fellowship. Dr. Warnick determined that a program was needed to increase the opportunity for neurosurgeons from outside the United States or Canada to come to the United States for the specific purpose of undertaking research in neuro-oncology. Dr. Warnick explained that "many international neurosurgeons, particularly from less developed countries, wish to come to the United States to carry out research on innovative ideas, but financial issues often limit their opportunities." The Section on Tumors/BrainLAB International Fellowship will address this unmet need.

After nearly a year of planning, two events were critical to the ultimate establishment of this fellowship. First, the AANS Executive Office agreed to administer the fellowship. Under the invaluable guidance of Michele Gregory, and more recently Terri Bruce, the AANS helped oversee the initial planning, including the application process, advertising for the fellowship, and all financial, contractual, and legal aspects of the program. This support provided the necessary foundation for converting a conceptual proposal into a concrete program.

Second, BrainLAB AG, a Germany-based company that develops surgical and radiosurgical image-guidance systems, agreed to fund the fellowship through an educational grant. A member of the Section on Tumors Executive Committee, Alessandro Olivi, MD, presented the proposal to Paolo Jelmoni, director of Marketing for BrainLAB AG. Stefan Vilsmeier, President and CEO of BrainLAB AG, backed the idea. BrainLAB is enthusiastic about this program, believing it will allow international neurosurgeons to take advantage of research opportunities in the United States and thereby advance the science underlying neuro-oncology. It is hoped that what is learned in these fellowships will be brought back and applied in the participants' countries of origin.

Fellows will be chosen through a competitive application process open to all international neurosurgeons or graduating neurosurgical residents from outside the United States or Canada. A review committee, consisting of the Chairman of the Section on Tumors and five others appointed by the Chairman, will examine all submissions. The initial review committee will include Ronald Warnick, MD, Frederick Lang, MD, Alessandro Olivi, MD, Howard Weiner, MD, Linda Liau, MD, and Jeffrey Bruce, MD. Applications will be judged based on the novelty and scientific merit of the proposed study, the credentials of the applicant, and the support provided by the accepting program/laboratory.

Although the focus must be on neuro-oncology, all categories of investigative studies will be considered eligible for this fellowship,

including (but not limited to) basic science, epidemiology, anatomic studies, preclinical or translational studies, and clinical trials. Areas of study may be within any subspecialty of neurooncology, including (but not limited to) primary brain tumors, metastatic brain tumors, spine and spinal cord tumors, peripheral nerve tumors, and skull base tumors. Preference will be given to proposals undertaking hypothesis-driven research.

The fellowship will include a stipend of \$50,000 that will be used to provide salary support for a period of one year and travel expenses. The fellowship will be awarded by January 15, for commencement of the fellowship on July 1 of each year. The first award will be granted in 2007 and the deadline for those applications is November 15, 2006.

Applications will be made available on the Section on Tumors Web site and the AANS Web site. The application includes a formal proposal (not to exceed five pages) that outlines the aims of the project, the background and rationale for the work, any preliminary results or supporting data for the project, and a detailed study design. The applicant must also submit a personal biographical sketch, a description of future academic plans, and a statement of why studying in the United States is important for the completion of the proposed work. The sponsoring investigator of the accepting laboratory/program will be required to submit a letter in support of the applicant that verifies the investigator's willingness to mentor the applicant and provide necessary space and supplies for the applicant during the project/study period. Two letters of recommendation are also required.

The Section on Tumors has established a list of investigators in the Unites States that are interested in sponsoring an international neurosurgeon. The investigators have provided a description of their respective facilities/programs and summaries of their areas of interest. Section members interested in joining this list can do so on the Section on Tumors Web site.

The winning fellow will be required to submit a written midyear progress report and, at the completion of the project, a written final summary report describing the results of the study. The applicant may also present an oral summary of the project at AANS or CNS annual meetings upon completion of the fellowship.

It is the hope that this fellowship will continue long into the future and will become a source of education and collaboration between centers in the United States and other countries. The Section on Tumors thanks all those who have worked so hard to make this fellowship possible.

Frederick Lang, MD

Please submit completed applications by **November 15, 2006** to Section on Tumors/BrainLAB International Research Fellowship Scientific Review Committee, c/o AANS, 5550 Meadowbrook Drive, Rolling Meadows, Ill., 60008-3852 U.S.A.

International Report: Italy



The AANS/CNS Section on Tumors is extremely excited about the upcoming 56th Annual Meeting of the Italian Society of Neurosurgery that will host the CNS in Rome, Italy on June 24-27, 2007. The two organizations have worked very closely together with even more frequent

and concentrated interactions recently. The success reached by both the 2004 CNS Annual Meeting held in San Francisco that hosted the Italian Society of Neurosurgery and by the 2005 Annual Meeting of the Italian Neurosurgical Society held in Turin last December, that saw substantial participation of North American neurosurgeons to the scientific panel, demonstrates this strong relationship. In addition, *Neurosurgery*, has consistently recognized Italian groups as major and steady contributors to the established success of the publication.

Following the Rome meeting, an important brain tumor satellite symposium (the Second Neuro-oncology Update) is scheduled to take place in Arezzo on June 28-30, 2007. That meeting promises to be as exciting, as far as the scientific content and the social agenda, as the one held in the same Tuscan city in 2005. The Section on Tumors is actively involved in the organization of the meeting, which includes the participation of most of the international members of the Section on Tumors itself. This official meeting will provide an ideal opportunity to enhance the ties and establish even more productive future collaborations not only between the Italian and the North American neurosurgical communities, but also among the whole international neuro-oncological community. We anticipate great participation and an exciting scientific program.

Below please find a list of the upcoming meetings in Italy:

- XIth National Congress of the Italian Association of Neuro-Oncology on October 1-4, 2006, Bergamo, Italy
- 55th Congresso Nazionale SINch Società Italiana di Neurochirurgia on November 19-22, 2006, Sorrento, Italy
- 56th Congresso Nazionale SINch Societa` Italiana di Neurochirurgia e CNS on June 24-27, 2007 Rome, Italy
- Second International Meeting, Neuro-Oncology Update on June 28-30, 2007 Arezzo, Italy

Francesco DiMeco, MD

Membership Committee Report



The AANS/CNS Section on Tumors recruitment efforts for the past six months resulted in 48 new active members. The most recent 14 new active members were approved at our last Executive Committee meeting. The Section welcomes the new members and is

looking forward to collaborating with them.

We are also looking forward to expanding our International membership. We thank Fumio Yamaguchi, MD, PhD for posting our invitation to join the Section on Tumors on the Japanese Neurosurgery Society Web site and are looking forward to additional postings by the European Neurosurgical Society.

Why join the Section on Tumors? Consider the following benefits:

- Journal of Neuro-Oncology 63% discount on annual subscription (save \$488)
- Biennial Tumor Satellite Symposium discount on meeting registration
- *Tumor News* exclusively for members, cannot be purchased

Total value up to \$588 per year!

Your membership also helps support the activities of the Section on Tumors, which serves as the official voice of the AANS and CNS in matters related to central nervous system tumors. The Section on Tumors deals with a myriad of tumor-related issues – including new CPT codes, resident and fellowship education, research initiatives, and other issues pertinent to neurosurgical tumor practice and policy.

Adjunct members are a great asset to the Section. We need each Active member to recruit at least one adjunct member from among their colleagues in neuroradiology and neuro-oncology, as well as nurses and physician assistants in our practices and clinics.

An application and details on membership requirements are available at: http://www.aans.org. Select "Member Applications" on the left-hand navigation, and choose "Tumor Section" from the drop-down box.

If you have any questions, please contact Dr. Isabelle M. Germano, Professor of Neurosurgery, Box 1136, Mount Sinai School of Medicine, One Gustave Levy Place, New York, NY 10029 or e-mail to: isabelle.germano@mountsinai.org.

Isabelle M. Germano, MD

International Report: Japan

The 24th Annual Meeting of The Japan Society of Brain Tumor Pathology was held in June 2006 in Okinawa, Japan. In a special lecture, a neuropsychologist discussed the role and importance of neuropsychology in brain tumor patients, with presentations of data of neuropsychological examinations before and after surgery. Medulloblastoma was one of the major symposium topics and was discussed in terms of oncogenesis, genetic profiling, image analysis and therapy.

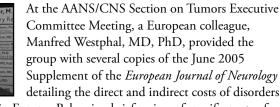


Several meetings regarding brain tumors are scheduled for Fall 2006. Upcoming meetings in Japan include:

- 18th Annual Meeting of Japanese Society for Skull Base Surgery on July 27-28, 2006, Nagoya, Japan
- Seventh Annual Meeting of The Japan Society of Molecular Neurosurgery on September 2-3, 2006, Tokyo, Japan
- 24th Annual Meeting of The Japan Society for Neuro-Oncology on October 1-3, 2006, Hokkaido, Japan
- 65th Annual Meeting of the Japan Neurosurgical Society on October 18-20, 2006, Kyoto, Japan
- The 11th Annual Meeting of the Japanese Congress for Brain Tumor Surgery on December 8-9, 2006, Osaka, Japan

Fumio Yamaguchi, MD, PhD

Cost of Disorders of the Brain: A Brief Review of the Report of the European Brain Council



of the brain in Europe. Below is a brief review of specific parts of the supplement relevant to Section on Tumor members.

The supplement contains 13 articles ranging from an introductory article that reviews the global costs of disorders of the brain in Europe, to articles focused on diagnostic subgroups within neurology, neurosurgery, and psychiatry. Articles covered the costs of: addiction, affective disorders, anxiety disorders, brain tumors, dementia, epilepsy, migraine, multiple sclerosis, Parkinson's disease, psychotic disorders, and trauma.

The Preface by Jes Olesen, MD, President of the European Brain Council (EBC), outlines the genesis of this project and provides background information about the EBC. A growing awareness about the importance of chronic neurological, neurosurgical and psychiatric conditions as compared to heart disease, cancer, and AIDS (Table 1) prompted the formation of the EBC. The EBC formed in 2003 - pulling together neurologists, neurosurgeons, psychiatrists, psychologists, basic neuroscientists, patient organizations, and corporate interests to promote brain research and to understand the economic burden of the diseases that they were to study. The group's first step was to analyze prior World Health Organization (WHO) burdenof-disease data, extracting European figures. These data indicated that brain disorders accounted for 35 percent of the disease burden in Europe, as calculated in terms of disability-adjusted life-years. As stated by Dr. Olesen, "...while decision makers obviously pay attention to burden, it was considered more important for them to know the actual cost of disorders of the brain". Working in collaboration with the Stockholm School of Economics, the group developed a modelof-care costs analysis using economic data, epidemiology data, and international statistical data. Results from these methods were validated internally and externally. The scope of the project included data from 25 European Union (EU) states plus Iceland, Norway, and Switzerland. The cost of the project was underwritten by an unrestricted grant from Danish drug company, H. Lundbeck A/S.

Since cost of care is an aggregate of direct and indirect costs, the study group included direct costs such as doctors' visits, hospital care, drug costs, nursing home care, and home care nursing. Indirect costs included reduced productivity from illness, absenteeism and early retirement *(Table 2)*. A prevalence-based study was used focusing on data from the year 2004. The total costs were estimated by the product of prevalence and cost per case. During the study there were 127 million Europeans living with brain disorders, out of a population of 466 million (27 percent). The total cost of brain disorders in 2004 was estimated as \$467 billion. Direct inpatient expenditures totaled \$163 billion, comprising inpatient stays of \$94 billion, outpatient visits \$54 billion, and drug costs \$15 billion.

Direct non-medical costs (social services, home care etc.) totaled \$87 billion. Indirect costs were \$216 billion of which mental disorders accounted for the largest amount of any diagnostic group *(Table 3)*. Of the 12 diagnostic groups analyzed for cost, mental disorders (excluding dementia) accounted for 62 percent (\$290 billion) of the total, followed by neurological diseases totaling \$101 billion, or 22 percent of the total. Neurosurgical diseases (brain tumors and trauma) made up a smaller fraction of the cost at \$10 billion, although brain tumors were the most costly disorder by patient (\$47,000) *(Table 4)*. The average cost of brain disorders in Europe was \$1,068.41 per inhabitant.

The article by Ekman and Westphal [Eur J Neurol 2005, 12 (Suppl. 1): 45-49] begins with a general review of the classification and incidence of brain tumors. As pointed out by the authors, a major limitation of some of the European data on incidence is that only malignant tumors are included in many databases. If one were to apply figures for the incidence of benign tumors in the United States to the European population, then 43 percent of all new tumors would be benign and leaving out these tumors may lead to a serious underestimate of the total burden of illness. The authors also reviewed papers from Sweden, England and Switzerland specifically addressing the costs of brain tumor patient care. In the study from Sweden, indirect costs accounted for 75 percent of the total cost and cost for early mortality was the largest component. Hospital care was the largest direct care cost item, with malignant gliomas accounting for 42 percent of direct care costs and meningiomas, 30 percent. In the English study of the direct costs associated with managing malignant glioma, the mean costs were \$33,575 per patient, of which 56 percent was for radiotherapy, 15 percent for acute care bed days and 13 percent for neurosurgical services. The authors concluded that "since indirect costs are by far the largest, the potential gains of more effective treatments may be substantial even if treatment costs as such would increase as a result of the introduction of new treatments."

Previous data included in this study have shown that the cost of disorders of the brain is greater than the costs of diabetes and cancer combined. The anticipated increase in the aging population will only increase this cost more, and the only methods to control the explosion in costs will be through increased funding for research, better prevention, better treatments, and more efficient methods of health care delivery. In the period of 1998–2002, \$109 million was spent on neuroscience research, only 8 percent of the life sciences budget for the EU and only 0.01 percent of the estimated costs for disorders of the brain in Europe. The study group concluded that "the huge cost and burden of brain disorders calls for increased efforts in research, health care and teaching" and that "…further investment in brain health will be very profitable for society". Let us hope that this message is received realistically by other countries around the world.

continued on page 7

Michael W. McDermott, MD

(1) European Journal of Neurology 2005, 12(Suppl. 1) pp. 1-92

Cost of Disorders continued from page 6

Table 1

Total Prevalence of Selected Brain Disorders in Europe 2004

Diagnostic Group	Prevalence
Anxiety Disorders	41,407,747
Migraine	40,777,009
Dementia	4,886,252
Epilepsy	2,690,608
Parkinson's Disease	1,158,990
Stroke	1,128,986
Trauma	708,954
Multiple Sclerosis	379,599
Brain Tumor	135,251

Table 2

Distribution of Total Costs of Brain Disorders

Cost Component	Percent of Total
Sick Leave	33%
Hospitalization	20%
Social Services	13%
Outpatient Care	12%
Premature death	7%
Early Retirement	7%
Informal Care	3%
Drugs	3%
Other Direct Costs	2%

Table 3

Distribution of Costs by Specialty

Specialty	Direct:	Direct:	Indirect
	Health Care	Non-Medical	
Neurosurgical	54%	4%	42%
Neurologic	25%	37%	38%
Psychiatric	39%	11%	50%

Table 4

Top 5 Disorders for Cost per Case

Rank	Disorder
1	Tumor
2	Multiple Sclerosis
3	Stroke
4	Dementia
5	Psychotic Disorders

Editor's Corner

We encourage submissions from the Tumor Section membership and from our organizational supporters for potential future publications of *Tumor News*. We encourage contributions related to specific tumor-related topics or of general interest to the neurooncology community.



If you have any suggestions for this newsletter or content to submit for publication, please contact me at:

Linda M. Liau, MD, PhD Professor of Neurosurgery UCLA Division of Neurosurgery E-mail: LLIAU@mednet.ucla.edu

Section on Tumors Web Site

In an effort to provide improvements in functionality, communication, and content, the Section on Tumors Executive Committee made a decision to move the Section on Tumors Web site to an independently-hosted site. The new site (www. tumorsection.org) was developed over the past few months and provides the membership with reference material and current information about tumor-related activities.

With regular updates, the Web site will contain current information about scientific highlights of upcoming meetings, as well as a schedule of meetings and courses. Communications about tumor-related issues from the AANS/CNS Washington Committee and international committees are included. The Section on Tumors newsletters are archived in PDF-format on the site. Fellowship opportunities and awards are catalogued on the site as an organized reference, and information on the mission, organization, and history of the Section on Tumors is available. Links to other professional organizations and journal

Web sites are also provided. In anticipation of patient visits, the Web site includes patient resources. This section includes a basic reference area for patient-related brain tumor

information, as well as links



to patient-oriented brochures and support groups. In addition, the patient section provides a searchable database of Section on Tumors members for patients to find member surgeons in their area.

As an added value to Section members, a members section has been created containing information of particular interest to Section members. Access to this area is available by using the username *"tumor"* and password *"section."* The members section contains a list of active clinical trials searchable by diagnosis, grade, and trial phase, as well as an electronic method of submitting a trial to be included in the database. A list of funding and research opportunities is included, as well as the Section on Tumors bylaws. A section of the site on tumor-related guidelines was developed by the guidelines subcommittee and is included as a reference for practitioners.

A searchable database of members of the Section on Tumors is present, differentiated from the public section by the inclusion of e-mail addresses.

A forum area has been created within the members section to allow communication between members regarding clinical questions, case reviews/discussions, and meeting and research information. In addition, a feature called "Selected Topic Reviews in Neuro-oncology" is being created.

The Section on Tumors intends to provide its members with a readily-available, up-to-date source of information and reference via our new Web site. The site compiles work from many subcommittees of the Section on Tumors. Although a good deal of thought and preparation was invested in the site thus far, we encourage feedback as Section members explore the site. Contact information is available on the Web site, or you may e-mail jsheehan@psu.edu.

Jonas Sheehan, MD

Section on Tumors Awards Committee Report

The Section on Tumors has established two new awards starting at the 2006 CNS Annual Meeting. The new awards recognize contributions from neurosurgeons working in the community and skull base surgery. Each award carries a cash prize of \$1000 and is limited to members of the Section on Tumors. All eligible members are encouraged to submit abstracts for these awards beginning with the upcoming CNS meeting.

Synthes Skull Base Award

The Synthes Skull Base Award will be given to an attending neurosurgeon, resident or fellow within the Section on Tumors who submits the best abstract related to skull base surgery. This award will be given at the annual meetings of the AANS and CNS. Made possible through a generous contribution from the Synthes Corporation, Franco DeMonte, MD, chair of the Skull Base Committee, was largely responsible for creating this award.

BrainLab Community Neurosurgery Award

The BrainLab Community Neurosurgery Award will be awarded at the annual meetings of the AANS and CNS. This award will be given to a neurosurgeon practicing in a non-academic setting with the best abstract related to central nervous system tumors. The effort to secure this award was spearheaded by Ronald Warnick, MD, and the award is made possible through the generosity of BrainLab.

Farber Award

Sponsored by the Farber Foundation, the Farber Award is presented at the annual meetings of the AANS and Society for Neuro-Oncology (SNO) in alternate years, and the awardee speaks at both meetings during the year of the award. The recipient is selected by the presidents of the two societies and the Section on Tumors awards chair based on nominees from the executive committees of both societies. The award recognizes the most promising investigators who are achieving significant results early in their careers and is given only once to a recipient.

The 2006 Farber Award winner is Mitchel S. Berger, MD, FACS, a long-standing member of the AANS/CNS Section on Tumors Advisory Board, in recognition of his significant contributions to the understanding of malignant gliomas. Dr. Berger is professor and chairman of the Department of Neurosurgery at UCSF, where he is also the director of the Brain Tumor Research Center. Dr. Berger will speak at the upcoming SNO meeting in the fall.

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, who has submitted the best basic science research paper.

At the 2006 AANS Annual Meeting, winner Florence LeFranc, MD, PhD, presented her paper, "Cardiotonic steroid-mediated decrease in the sodium pump activity contributes therapeutic benefits in experimental glioblastomas".

Mahaley Clinical Research Award

The Mahaley Clinical Research Award is given at each of the AANS and CNS annual meetings to a neurosurgery resident, fellow or attending physician who submits the best clinical study in neuro-oncology.

The Mahaley Award was given to Manish Aghi, MD at the 2006 AANS Annual Meeting for his presentation, "Molecular predictors of thrombotic disorders in glioblastoma patients".

Young Investigator Award

Sponsored by the American Brain Tumor Association (ABTA), 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 be out of training for less than six years.

The recipient of the Young Investigator Award, presented at the 2006 AANS Annual Meeting, was Amy Heimberger, MD for her presentation, "An epidermal growth factor receptor variant III peptide vaccination appears promising in newly diagnosed GBM patients: Preliminary results of a randomized Phase II clinical trial".

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.

The recipient of the Integra Foundation Award, presented at the 2006 AANS Annual Meeting, was Burak Sade, MD for his paper, "The Novel 'CLASS' algorithmic scale for patient selection in meningioma surgery".

Journal of Neuro-Oncology Award

The Journal of Neuro-Oncology Award is sponsored by Springer and is presented each year at the AANS annual meeting to a highly-ranked abstract in either clinical or basic science related to neuro-oncology. This year's recipient was Ichiro Nakano, MD from UCLA for his paper, "Maternal embryonic leucine zipper kinase is highly expressed in brain tumor progenitors and regulates their proliferation".

Bittner Award

The Bittner Award is endowed by E. Laurie Bittner in memory of her husband, Ronald L. Bittner. It is awarded to the best abstract submitted each year to the AANS annual meeting on brain tumor research by a resident or junior faculty member. This year's winner was D. Cory Adamson, MD, PhD for his paper, "A novel medulloblastoma oncogene, OTX2, correlates with severe anaplasia and patient survival".

Through our sponsoring agencies, the Section on Tumors Awards Committee is pleased to be able to continue to support excellence in both clinical and basic science research of tumors of the central and peripheral nervous systems. Photos of all award recipients from the 2006 AANS Annual Meeting are on the Tumor Section Web site at: www.tumorsection.org/awards/index.htm. All of our awards require that the recipient be an active, international or resident member of the Section on Tumors and each award is given to a recipient only once. At the upcoming October 2006 CNS Annual Meeting in Chicago, the Mahaley, Preuss, Young Investigator, Integra Foundation, BrainLab, and Synthes awards will be presented. For further details, please visit the Section on Tumors Web site at www.tumorsection.org.

Washington Committee Report

In the last edition of the newsletter, a new Category III (tracking) CPT code for the surgical placement of convection-enhanced delivery (CED) catheter(s) was discussed.



0001T: Stereotactic placement of infusion

catheter(s) in the brain for convection enhanced delivery of therapeutic agent(s), including computerized stereotactic planning and burr hole(s)

This code became active July 1, 2006, and the AANS/CNS Washington Committee encourages neurosurgeons to report it, as this is crucial to progressing from a Category III "tracking" code (for which each practice must negotiate payment from various insurers separately) to a Category I code (which most 3rd party payors will recognize and honor).

In addition, the Centers for Medicare & Medicaid Services (CMS) just agreed to the following new ICD-9 codes for hospital inpatient billing which will be effective October 1, 2006:

- 01.26: Insertion of catheter(s) into cranial cavity or tissue
- 01.27: Removal of catheter(s) from cranial cavity or tissue
- 01.28: Stereotactic placement of intracerebral catheter(s) via burr hole(s) for convection enhanced delivery

Additional codes are still under discussion at this time and the AANS/CNS Washington Committee will provide additional information when it is available.

Andrew E. Sloan, MD

Resident's Corner: Neurosurgery Charity Softball Tournament For Pediatric Brain Tumor Research

The Third Annual Neurosurgery Charity Softball Tournament was played on June 10, 2006 at the Great Lawn of Central Park in New York City. The event was hosted by Columbia University and sponsored by George Steinbrenner and Alex Rodriguez of the New York Yankees, with all proceeds benefiting pediatric brain tumor research. This year's competing teams included the departments of neurosurgery from eight of the nation's top medical centers - Columbia University, Harvard University, Johns Hopkins University, Cornell University, New York University, University of Pennsylvania, Albert Einstein College of Medicine, and Mt. Sinai School of Medicine. This year, the University of Pennsylvania claimed the championship after sliding by Columbia University 13-10 in the finals, while Mt. Sinai School of Medicine finished in third place. The championship trophy, "The J. Lawrence Pool Memorial Trophy", named in honor of the former Columbia University chairman, will be housed at The University of Pennsylvania during the upcoming year.

Organized by Ricardo J. Komotar, MD, a neurosurgery resident at Columbia University, this tournament has raised nearly \$100,000 for the Columbia University Pediatric Brain Tumor Research Fund (www.KidsBrainResearch.org). The planning is underway for next year's game on June 9, 2007 at the Fourth Annual Neurosurgery Charity Softball Tournament. For photos from the game and of the winning team, please see www. tumorsection.org.

Resident's Corner: CNS Resident SANS Challenge

The CNS will sponsor a "Jeopardy"-style competition for residents at the 2006 CNS Annual Meeting in Chicago in October. The *CNS Resident SANS Challenge* will be a fun, educational, and potentially financially rewarding way to emphasize resident participation and highlight the educational mission of the CNS.

The CNS Resident SANS Challenge will consist of three phases. Phase I will be an online multiple-choice, closed-book, individual work exam with questions randomly selected from SANS. In the spirit of fairness, please encourage your residents not to discuss the exam during the testing period. Every resident member of the CNS will be eligible to play. The exam will be scored based on number of correct and incorrect answers with a time bonus. All scores will be kept confidential. The two best scores of all participating residents in each program will be added to determine the final program score. The top nine programs from around the country will be notified and provided with a list of their residents (no scores will be released) who took the online exam. These programs may select a two-player team from any of their residents who took the online exam. Each player will receive four nights lodging at the 2006 CNS Annual Meeting in Chicago.

Phases II and III will take place during the 2006 CNS Annual Meeting. The top nine teams will compete live in preliminary "Jeopardy"-format competitions where, again, questions will be based on SANS content. The preliminary rounds will take place from 4:30-6:30 PM on Sunday, October 8, 2006. The location will be announced closer to the date of the meeting, but will be in close proximity to the CNS opening reception. The winning team from each of these three rounds will then go on to compete in the championship round, which will be held Tuesday evening in a location near the resident recruitment social. The top three teams will receive awards and cash prizes distributed to the programs' resident education fund.

All neurosurgical training programs in North America are eligible to participate. The only pre-requisite to play is that each competing resident must be a CNS member, and residents will need to enter their member number before playing. Residents who are not currently members of the CNS are encouraged to join so they may compete as well.

If you would like a preview of the game or more detailed rules, please visit the CNS Web site at www.CNS.org. The *CNS Resident SANS Challenge* Web site will be open several weeks prior to the testing period for rules review and will remain open after the competition ends. Team results from the Chicago rounds will be posted.

Leon E. Moores, MD

Section on Tumors Leadership

For a complete list of officers and Section leaders, see: http://www.tumorsection.org/tumorsection/committees.htm

Richard C. E. Anderson, MD

AANS/CNS Section on Tumors

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Section on Tumors Satellite Symposium: April 13-14, 2007—Washington, DC

The AANS/CNS Section on Tumors Seventh Biennial Satellite Symposium will be held at The Renaissance Hotel, Washington, DC (2007 AANS Annual Meeting headquarters hotel) on April 13-14, 2007. Being held in conjunction with the AANS Annual Meeting, the Section on Tumors



Satellite Symposium will offer an exciting scientific program including over 70 oral and poster abstract presentations. In addition, next year's symposium will feature new educational and interactive sessions including:

- 1) An international session with presentations by tumor surgeons from around the world.
- 2) A session featuring case presentations and neuro-oncology management for the community neurosurgeon.
- 3) A session featuring the latest innovations and treatments for malignant glioma.
- 4) A session featuring models for career development in academic neurosurgery for the tumor surgeon.
- 5) A session featuring late-breaking news to provide the most up-to-date information on clinical and scientific topics in neuro-oncology.

In addition, next year's symposium will be paired with two practical clinics for tumor surgeons offered on Sunday, April 15, including a special course on local delivery methods. Registration for AANS practical clinics will be offered in January 2007 – additional fees are required.

Washington, DC is an ideal city for families to visit, with historical sites close to the symposium site, so plan on bringing the entire family!

Updated registration and housing for the Section on Tumors Satellite Symposium will open to members on Wednesday, November 1, 2006 and to non-members on November 15, 2006. Watch the Section on Tumors Web site for further information (www.tumorsection.org) or contact Andrew T. Parsa, MD, PhD via e-mail at parsaa@neurosurg.ucsf.edu.

Andrew T. Parsa, MD, PhD

International Society of Pituitary Surgeons Meeting

I am pleased to announce the launch of the Web site for the 2006 Meeting of the International Society of Pituitary Surgeons (ISPS) in Bariloche, Argentina on October 18-21, 2006. Please visit http://www.neurosurgery.emory.edu/ isps.htm for meeting registration forms as well as useful travel information. Please check the Web site occasionally for program updates.

The ISPS meeting is just prior to the XXXII CLAN (Latin-American Congress of Neurosurgery), which will be held in Buenos Aires on October 21-26, 2006. A link is available on the ISPS Web site for those interested in attending.

All communications and confirmations for the ISPS meeting will be sent via email. Please contact me or my assistant Jennifer.oneil@ emoryhealthcare.org at any time with questions/concerns or if you experience any difficulties navigating the Web site. I look forward to seeing you in October!

Nelson Oyesiku, MD, PhD