

An outstanding Tumor

Section program is

the AANS Annual

Meeting in Chicago,

2:45-5:30 p.m. The

Broaddus, MD, and

includes an hour-long

session on the topic of

program has been

organized by Bill

planned for Wednes-

day, April 10, 2002, at

# Chairman's Message

## James T. Rutka, MD, PhD



James T. Rutka, MD, PhD

brain tumor invasion. Following this, we will recognize our many award winners for best abstracts submitted to the Tumor Section. These include the Preuss Resident Research Award, the Mahaley Award sponsored by the National Brain Tumor Foundation, the American Brain Tumor Association Young Clinical Investigator Award, and an award for the best Translational Research Grant from the National Brain Tumor Foundation. An open paper session will then follow. Following the Tumor Section program on Wednesday, April 10, we will have a welcome reception for new and prospective members of the Tumor Section from 6 to 7 p.m. in the Mayfair Room of the Sheraton Chicago Hotel and Towers. All Tumor Section members are invited.

A mandate of the Tumor Section has been to provide educational symposia to the membership. Accordingly, every two years we organize a Tumor Satellite Symposium which takes place at the conclusion of one of the annual meetings in neurosurgery in North America. It is with great pleasure that we announce this year's Brain Tumor Satellite Symposium to take place at the Sheraton Chicago Hotel and Towers April 11-12, 2002. An outstanding program has been organized by Nalin Gupta, MD, PhD. Topics of interest include gene therapy, low grade gliomas, and skull base tumors. The keynote lecturer will be Arturo Alvarez-Buylla, MD, who will speak on neural stem cells. Details of the Brain Tumor Satellite Symposium can be found within the pages of this newsletter. Members of the Tumor Section receive a registration discount to attend the symposium.

Another educational activity sponsored by the Tumor Section at the AANS Annual Meeting in Chicago includes an immunotherapy workshop organized by Roberta Glick, MD, which will take place Sunday, April 7, 12-6 p.m. at the Sheraton Hotel and Towers (Sheraton Ballroom I). In addition, Jeffery Bruce, MD, has once again organized a highly informative course on the subject of principles of neuro-oncology for the general neurosurgical practitioner (details inside). This Practical Clinic will be held on Sunday, April 7, 2002. Several executive members of the Tumor Section will be participating in this course.

Joseph Piepmeier, MD, editor of the *Journal of Neuro-Oncology*, has described an outstanding benefit for members of the Tumor Section by offering a significant discount toward a subscription to the journal. Details of this offer can be found within the pages of this newsletter. This is yet another tangible example of how the Tumor Section continues to work for its membership, and we thank Dr. Piepmeier for facilitating this special offer.

We look forward to seeing all of you at the AANS Annual Meeting in Chicago April 6-11, 2002.

Mark your Calendars for the 70<sup>th</sup> AANS Annual Meeting!

"AANS: Speaking Out"

April 6-11, 2002 McCormick Place Lakeside Center Chicago

See details at www.neurosurgery.org/aans/meetings/2002



Tumor Section Highlights at the 2002 AANS Annual Meeting

### 3

Fifth Biennial Brain Tumor Satellite Symposium

> **4** Editor's Corner

## 5

Tumor Section Honors Achievement

## 6

ACOSOG Opens Z0300, Group's First Neurosurgery Study

7

**Membership Application** 

## 8

Officers of the AANS/CNS Joint Section on Tumors, 2001-2003

# Tumor Section Highlights at the 2002 AANS Annual Meeting

## AANS/CNS SECTION SESSION ON TUMORS Wednesday, April 10, 2:45-5:30 pm

This session will serve as a forum for the presentation of topics on novel biologic therapies for brain tumors, such as the use of modulators of angiogensis, of neural stem cells, and of oncolytic viruses.

Special Symposium: CNS Tumor Invasion	2:45-3:45 PM	
Farber Award Presentation and Lecture	3:45-4:00 рм	
Award Presentations	<b>4-4:30</b> PM	
Scientific Session	4·30-5·30 PM	

Moderators: Michael McDermott and Ronald Warnick

## 848 Oligodendrocyte Lineage Genes as Molecular Markers for Glial Tumors

John K. Park, Q. Richard Lu, Charles D. Stiles, Peter McL. Black

#### 849 Radiosurgery Is Equivalent to Complete Tumor Resection (Simpson Grade 1) for Patients With Small to Moderate-Sized Meningiomas

Bruce Ē. Pollock, Scott L. Stafford, Andrew Utter, Deborah A. Gorman, Caterina Giannini, Shawn A. Schreiner

#### 850 Long-Term Follow-Up Results with Audiological Assessment After Fractionated Stereotactic Radiotherapy for Vestibular Schwannomas

Yutaka Sawamura, Hiroki Shirato, Tohru Sakamoto, Hidefumi Aoyama, Kazuo Miyasaka

#### 851 Volumetric Stereotaxis and the Supratentorial Occipitosubtemporal Approach in the Resection of Posterior Hippocampus and Parahippocampal Gyrus Lesions Stephen M. Russell, Patrick J. Kelly

#### 852 Intratumoral Infusion of Liposome-HSV-1-tk-Gene Complex Followed by Systemic Ganciclovir for the Treatment of Recurrent Glioblastoma Multiforme

Juergen Voges, Andreas Jacobs, Wolf-Dieter Heiss, Volker Sturm, Regina Reszka

## 853 Symptomatic Rathke's Cleft Cyst: A 72 Consecutive Series in Three Institutions

Hee-Won Jung, Jeong Eun Kim, Jeong Hoon Kim, Oh Lyong Kim, Sun-Ha Paek, Dong Gyu Kim

For up-to-the-minute program updates or to download the complete Annual Meeting schedule onto your Palm OS, go to www.neurosurgery.org/aans/ meetings/2002



### 029 Update on Tumors for the General Neurosurgeon

Sunday, April 7, 2002, 8:00 AM-12 PM Director: Jeffrey N. Bruce

Faculty: Ossama Al-Mefty, Michael W. McDermott, Mitchel S. Berger, Thomas C. Origitano, Joseph M. Piepmeier, Corey Raffel, James T. Rutka, Raymond Sawaya, Jack P. Rock

Clinic Fee: \$450 Material Fee: \$0 Total: \$450 This clinic will provide the practicing clinician with an up-todate overview of current management strategies for all types of benign and malignant brain tumors. The seminar includes current research topics but emphasizes practical management issues.

Learning Objectives: After completing this clinic participants should be able to identify the state-of-the-art management of benign and malignant brain tumors (including glial tumors, meningiomas, acoustic neuromas, skull base tumors, pediatric tumors, metastases, craniopharyngiomas, and pineal region tumors), and discuss current concepts in glioma management (including surgical techniques, adjuvant treatments, tumor biology, and practical clinical management decisions), and apply current knowledge about brain tumors to daily clinical practice decision-making.

## SPECIAL ANNOUNCEMENT TO THE MEMBERS OF THE AANS/CNS SECTION ON TUMORS!

## **Kluwer Academic Publishers**

is pleased to announce that you can now receive a full annual subscription at a special discount to the

## **Journal of Neuro-Oncology**

The 2002 subscription rate to the members of the AANS/CNS Section on Tumors is \$258.00. This represents a greater than 60% reduction in the regular price.

The annual subscription includes 12 monthly issues plus 3 additional special issues focused on topics of interest to our readers.

Requests for subscriptions should be sent to: Kluwer Academic Publishers Order Department PO Box 358 Accord Station Hingham, MA 02018-0358 Fax: (781) 681-9045 Phone: (781) 871-6600 E-mail: kluwer@wkap.com

Please identify yourself as a member of the AANS/CNS Section on Tumors to receive the discount.

# AANS/CNS Section on Tumors Fifth Biennial Brain Tumor Satellite Symposium

#### **Sheraton Chicago Hotel & Towers / April 11–12, 2002** *Jointly sponsored by the American Association of Neurological Surgeons*

The Fifth Biennial Brain Tumor Satellite Symposium is scheduled to take place at the Sheraton Chicago Hotel and Towers in Chicago, Ill., April 11–12, 2002, in conjunction with the AANS Annual Meeting.

**UPDATE FOR 2002:** This outstanding scientific tumor program has been organized to include numerous invited speakers with expertise in brain tumor research and therapy. Specific research topics, which will be formally presented and reviewed, include novel delivery strategies for anti–tumor agents, skull base treatment paradigms, and translational strategies for adult brain tumors. A special lecture on neural stem cells will be given by Arturo Alvarez-Buylla, MD. For any questions concerning this program, please contact Nalin Gupta, the 2002 Scientific Program chairman, at nalin@itsa.ucsf.edu, or contact the AANS at (847) 378–0500.

#### **Continuing Medical Education Credit**

This activity has been planned and implemented in accordance with the Essentials and Standards of the Accreditation Council for Continuing Medical Education through the joint sponsorship of the American Association of Neurological Surgeons and the AANS/ CNS Section on Tumors. The Accreditation Council for Continuing Medical Education (ACCME) accredits AANS to sponsor continuing medical education for physicians. The AANS designated this educational activity for a maximum of 10 hours in



Photos courtesy of the Chicago Convention and Tourism Bureau



category 1 credit toward the AMA Physician's Recognition Award. Each physician should claim only those hours that he or she actually spent in the educational activity.

### **Hotel Information**

Rooms for the Brain Tumor Satellite Symposium are still available at the Sheraton Chicago Hotel and Towers. Call (800) 325-3535 and identify yourself as a part of AANS to get the special rate.

## Thursday, April 11, 2002

Exhibits And Poster Viewing	1-5 рм
Welcome—James T. Rutka	1-1:05 рм
Meeting Overview—Nalin Gupta	1:05-1:15 рм
Viral Gene Therapy For Brain Tumors Herpes Virus—James M. Markert, Jr.	1:15-2:15 рм

### Reovirus—Peter Forsyth

Adenovirus—Frederick F. Lang, Jr.

Moderator: Robert L. Martuza

In this session, the advantages and disadvantages of three types of virus vectors, herpes virus, reovirus, and adenovirus, currently developed for brain tumor therapy will be discussed. Current clinical trials and planned future trials will be presented.

*Learning Objectives:* After completing this session, participants should be able to demonstrate how these newer therapeutic agents will be applied to the treatment of brain tumors.

#### Special Topic—Ralph R. Weichselbaum 2:15–2:45 PM Biologic Targeting of Radiation Therapy

Moderator: Nalin Gupta

*Learning Objectives:* After completing this session, participants should be able to describe how combining biologic tools with radiation therapy can improve the therapeutic response of brain tumors. The use of radiation-induced genes delivered by engineered viruses will be discussed.

Discussion	<b>2:45-3</b> рм	
Break—Exhibits and Poster Viewing	<b>3-3:30</b> рм	
Free Papers (Including Best Poster Award) Moderator: Ronald E. Warnick	<b>3:30-5</b> рм	
Keynote Lecture—Arturo Alvarez-Buylla Neural Stem Cells Disguised as Astrocytes	<b>5-6</b> рм	
Dinner—Poster Viewing	<b>6:30-8:30</b> рм	

## Friday, April 12, 2002

#### Continental Breakfast

#### The Management of Low Grade Gliomas 8:00–9:30 AM

The Role for Early Surgery—Mitchel S. Berger Does Extent of Resection Affect Outcome?—Peter McL. Black Review of Current Clinical Data—Joseph M. Piepmeier Moderator and Closing Remarks: Raymond Sawaya

*Learning Objectives:* After completing this session, participants should be able to describe the nonsurgical and surgical approaches for the current management of low-grade gliomas. The role for early surgery will be presented and its impact upon long-term outcome in treated patients. Participants should be able to differentiate between the indications for surgery and other treatment such as radiation and chemotherapy at the time of initial diagnosis and at recurrence.

#### **Break—Exhibits And Poster Viewing**

#### **Free Papers**

10-11:30 AM

9:30-10 AM

7-8 AM

(Including Best Resident Oral Presentation Award) Moderators: Peter B. Dirks and Linda M. Liau

### Luncheon Seminar—Primer

in Current Molecular Techniques Bioinformatics—Michael D. Taylor DNA Arrays—Nalin Gupta Mouse Models—Abhijit Guha Moderator: E. Antonio Chiocca

#### Skull Base Chondrosarcomas and Chordomas 1–2 PM Surgical Options—Ossama Al-Mefty

11:45 AM-12:45 PM

Radiosurgery—Michael W. McDermott Proton Beam—Lilia N. Loredo Moderator: William T. Couldwell

*Learning Objectives:* After completing this session, participants should be able to describe the current management of skull base chondrosarcomas and chordomas. Speakers will present details of treatment of these lesions with an emphasis on surgical techniques, and radiation therapy. Participants should be able to apply these treatment recommendations for their own patients.

Break—Exhibits And Poster Viewing	<b>2-2:30</b> рм	
Free Papers Moderator: Roberta P. Glick	<b>2:30-4</b> PM	
Adjournment	<b>4</b> PM	

## 2002 AANS Education and Practice Management Course Schedule

Beyond Residency: The Real World

October 26, 2002 Chicago, Illiniois

Innovations in Spinal Fixation: An Advanced Course July 27-28, 2002 Memphis, Tennessee

#### Managing Coding & Reimbursement Challenges in Neurosurgery

May 10-11, 2002 August 23-24, 2002 September 6-7, 2002 November 15-16, 2002 Anaheim, California Boston, Massachusetts Chicago, Illinois Washington, D.C.

Neurosurgical Practice Management: Managing Your Practice by the Numbers May 12, 2002 Anaheim, California

## Neurosurgical Review by Case Management: Oral Board Preparation

May 26-28, 2002Hartford, ConnecticutNovember 10-12, 2002Houston, Texas

For more information or to register, call (888) 566-AANS or visit www.neurosurgery.org/aans/meetings/epm/ epmcourses.html.

## Editor's Corner Gene H. Barnett, MD

In this issue James Rutka, MD, PhD, chairman of the AANS/ CNS Section on Tumors, reviews the Tumor Section activities at the upcoming meeting of the American Association of Neurological Surgeons (AANS), as well as other educational activities of the section including the Brain Tumor Satellite Symposium that follows the AANS meeting. The schedule for the symposium can be found on page 3.

The winners of the awards presented by the Tumor Section at the fall Congress of Neurological Surgeons meeting, and those to be awarded this spring are reviewed in an article by Michael McDermott, MD.

Also, we include announcements of a special offer to Tumor Section members from Kluwer Academic Publishers, as well as a new radiosurgery trial offered by the American College of Surgeons Oncology Group.

Let me know what you would like to see in this newsletter, or contribute a letter or article for publications. Contact me at:

Gene H. Barnett, MD Department of Neurosurgery–S80 The Cleveland Clinic 9500 Euclid Avenue Cleveland, Ohio 44195 Phone: (216) 445-1379 Fax: (216) 444-9170 E-mail: barnett@neus.ccf.org

# **Tumor Section Honors Achievement**

## By Michael McDermott, MD

t the upcoming AANS Annual Meeting in Chicago the Farber Award will be presented in addition to the Mahaley, Preuss, and Young Investigator awards.

The Farber Award winner this year is Ab Guha, MD, professor of surgery (Neurosurgery), Western Hospital, University of Toronto and co-director and scientist: Arthur & Sonia Labatts Brain Tumor Center, Hospital for Sick Children, University of Toronto. Dr. Guha was selected as the most promising young neurosurgical scientist achieving promising results early in his career. The topic of his presentation is "Impact of Novel Animal Brain Tumor Models on Human Disease."

The Mahaley Award winner is Joung H. Lee, MD, who heads the Section of Skull Base Surgery of the Department of Neurosurgery at the Cleveland Clinic. He will speak about "Meningiothelial Meningiomas: The Predominant Subtype in Skull Base and Spinal Meningiomas."

The National Brain Tumor Foundation Translational Research Award winner is Randy L. Jensen, MD, PhD, who will present "Treatment of Human Meningiomas With Calcium Channel Antagonists."

The Preuss Award winner is Jorge A. Gonzalez-Martinez, MD, who will present "Outcome of Awake Craniotomy and Functional Mapping Surgery of Eloquent Brain Lesions."

The Young Investigator Award winner is Howard L. Weiner, MD, who will present "Retrovirus-Sonic Hedgehog Infection of Murine Embryonic Cerebellar Granule Cells Leads to Tumor Formation."

#### Web Page

The Awards Committee would like to thank Frederick Lang, MD, for bringing the Web pages on awards and grants up to date (www.neurosurgery.org/tumor/awards.html) Descriptions of each award within the AANS/CNS Section on Tumors can be found as well as deadlines, instructions for submission, award amounts and past winners. Thanks also to James T. Rutka, MD, and Raymond Sawaya, MD, for their review of all materials during the update process.

#### **Awards Process**

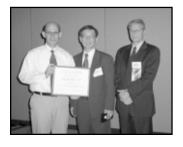
At each semi-annual meeting of the AANS and CNS, the Mahaley, Preuss, and Young Investigator awards are presented. These awards are determined by the abstract with the highest average score (weighted average of 10 reviewers) as judged through a peer review process. The completed manuscript is submitted to the section chair. A single individual can only win each award once.

The NBTF Translational Research Grant is reviewed separately by a scientific advisory panel from the NBTF. The panel notifies the chair of the Tumor Section who the recipient will be.

For the Farber Award, a subcommittee composed of Dr. Rutka,

continued on page 6

The Awards Committee would like to congratulate the winners of the Mahaley, Preuss, and Young Investigator awards who gave their presentations at the 2001 Annual Meeting of the Congress of Neurological Surgeons in San Diego.



The Mahaley Award, given to the best clinical research paper submitted, was awarded to Hoe-Dong Jho, MD, from the University of Pittsburgh for his pioneering clinical investigations into the application of endoscopic techniques for skull based

tumors. The award was presented by Jim Rutka, MD, and Mr. Robert Tufel from the National Brain Tumor Foundation (NBTF). The award is sponsored by the NBTF.

The Preuss Award, given to the best basic science research paper submitted by a resident, was presented to Andrew T. Parsa, MD, chief resident from Columbia University in New York for his work on immunity to intracranial tumors using



live cellular vaccine genetically engineered to regress after inoculation. The award was presented by Ray Sawaya, MD, and is sponsored by the Preuss Foundation.



The Young Investigator Award, given to best research paper submitted by a young neurosurgeon within the first six years of practice, was presented to Randy L. Jensen, MD, for his work on HIF1amediated VEGF secretion in

intracranial tumors. The award was presented by Michael McDermott, MD, and is sponsored by the American Brain Tumor Association.

# ACOSOG Opens Z0300, Group's First Neurosurgery Study

The American College of Surgeons Oncology Group (ACOSOG) has activated study Z0300, "a phase III randomized trial of the role of whole brain radiation therapy in addition to radiosurgery in the management of patients with one to three cerebral metastases." Z0300 is the first study opened by the group's Brain and Central Nervous System Organ Site Committee.

Participating patients will receive either radiosurgery (RS) alone (Arm 1) or RS combined with whole brain radiation therapy (WBRT) (Arm 2). The primary objective of the study is to ascertain if one treatment, compared to the other, is associated with better overall survival. Secondary objectives will compare time to local failure, quality of life, duration of functional independence, long-term neurocognitive status, and post-treatment toxicity.

The study provides an opportunity to gain critical comparative data about therapeutic options for patients with cerebral metastases arising from an extra-cerebral primary tumor. The ACOSOG has set an accrual goal of 96 patients per year for five years, with a total accrual of 480 patients.

Anthony Asher, MD, the director of the Brain Tumor Program at Carolinas Medical Center in Charlotte, N.C., is the study chair for ACOSOG Z0300. Dr. Asher also serves as the Brain and CNS Organ Site Committee Chair for the ACOSOG. The trial will be open to all ACOSOG members. Interested surgeons and oncologists need to become ACOSOG members before participating in the study. Membership applications and other information about participating in ACOSOG trials can be found on the group's Web site at www.acosog.org. There is no application fee. Questions about the membership process can be directed to Angela Venetta, ACOSOG membership coordinator, at (919) 668-8549 or via e-mail to venet001@surgerytrials.duke.edu.

Physicians participating in the Z0300 trial will also need to attend a study-specific education course (SSEC) prior to enrolling patients in the trial. The first SSEC for Z0300 was held Saturday, March 2, at the ACOSOG Coordinating Center at Duke University. The SSEC will also be offered on Friday, April 5 at the Sheraton Chicago Hotel and Towers, one day before the American Association of Neurological Surgeons Annual Meeting.

The ACOSOG is funded by the National Cancer Institute to conduct prospective, randomized, clinical trials evaluating surgical therapies in the management of patients with malignant tumors.

For more information about Z0300 or other ACOSOG trials, please contact Meggan Monroe, ACOSOG public relations coordinator, at (919) 668-8156 or via e-mail to monro015@surgerytrials.duke.edu.

### Tumor Section Honors Achievement (continued from previous page)

chairman of the AANS/CNS Section on Tumors, Edward Shaw, MD, president of the Society for Neuro-Oncology, Mitchell Berger, MD, from the Tumor Section's advisory board, and Mr. Jim Farber takes into consideration names submitted by the executive committee.

#### **Award Updates**

Members should be aware of two changes related to the Mahaley Award and Farber Award.

The Mahaley Award dollar amount will be increased to \$1000 from \$500 as of the CNS 2002 meeting. The section would like to thank Janice Brewer and the board of the National Brain Tumor Foundation for this increase.

The Farber Award, sponsored by the Farber Foundation and Mr. Jim Farber, will now be awarded on alternate years at the AANS and Society for Neuro-Oncology annual meetings. The awardee will be a promising new investigator who is achieving significant results early in his or her career. The schedule for presentation of the award and recipient lecture will be:

AANS 2002 AANS 2004 SNO 2003 SNO 2005 Finally the awards committee would like to thank our sponsors for their continued support:

American Brain Tumor Foundation The Young Investigator Award National Brain Tumor Foundation The Mahaley Award The Translational Research Grant The Preuss Foundation The Preuss Award The Farber Foundation and Mr. Jim Farber

The Farber Award

**Moved? New E-mail?** Notify AANS, CNS and ABNS of changes to your contact information online. Go to www.neurosurgery.org/directory, enter your name, click the "update your listing" button, and follow the instructions to quickly and easily update your listing for all three organizations at once.



Application for Membership

## **AANS/CNS Section on Tumors**



Eligibility: Members of the AANS and/or CNS who have demonstrated a special interest in tumors of the nervous system. Note: Adjunct Membership is available to non-neurosurgeons. Please contact the AANS office at 847-378-0500 for an Adjunct Membership application.					
I.	Biogra	phical:			
	(A)	Name:			
	(B)	Home Address:			
	(C)	Office Address:			
		Phone: Fax:			
	(D)	E-Mail:			
II.	Catego	ory of Membership Requested:			
	□ Ac	tive Associate International Resident/Fellow* Adjunct			
III	Memb	ership, Certification and Practice:			
	(A)	Are you certified by the American Board of Neurological Surgery?			
	(B)	For Resident Applications-Expected Residency Completion Date (month/year)			
	(C)	Are you a member of			
		1. American Association of Neurological Surgeons?  □ Yes □ No			
		2. Congress of Neurological Surgeons?			
	(D)	Are you currently involved in brain tumor research? Clinical- 🛛 Yes 🖓 No Basic- 🖓 Yes 🖓 No			
Suggestions on Section activities that would benefit you:					
	*Mem	Signature of Applicant Date bership dues are waived for applicants currently enrolled in a neurosurgical residency program.			
Please return completed application and curriculum vitae to: Ronald E. Warnick, MD University of Cincinnati Medical Center P.O. Box 670515/ Neurosurgery Cincinnati, OH 45267-0515 Phone: (513) 558-3179 Fax: (513) 558-0886 E-mail: nsgymd@aol.com					

#### **AANS/CNS Section on Tumors**

5550 Meadowbrook Drive Rolling Meadows, Illinois 60008 FIRST CLASS U.S. POSTAGE PAID Des Plaines, IL Permit No. 329

#### Officers of the AANS/CNS Joint Section on Tumors, 2001-2003

**Chairman** James T. Rutka, MD, PhD

**Past Chairman** Joseph M. Piepmeier, MD

Secretary-Treasurer Raymond Sawaya, MD

#### **Advisory Board**

Mark Rosenblum, MD Peter McL Black, MD Mark Bernstein, MD Edward R. Laws Jr., MD Jack Rock, MD Roberta Glick, MD Mitch Berger, MD Ossama Al-Mefty, MD

Awards Committee Michael McDermott, MD

**Bylaws** Andrew Sloan, MD Membership Ronald E. Warnick, MD

Newsletter Gene H. Barnett, MD

Membership Services Frederick J. Lang, MD

Nominating Joseph M. Piepmeier, MD

**Research** Linda Liau, MD

**Guidelines** Jeffrey Olson, MD

Program William T. Couldwell, MD (CNS San Diego 2001) William Broaddus, MD (AANS Chicago 2002) Jeffrey Bruce, MD (CNS Philadelphia 2002) Ab Guha, MD (AANS San Diego 2003)

#### Education

Nalin Gupta, MD (Satellite Symposium) Isabelle Germano, MD (*Neurosurgical Focus*) Antonio Chiocca, MD (*J Neuro-Oncology*) Anthony Asher, MD (*Select Review*) Corey Raffel, MD (Exam questions, Abstract Grading) Jeffrey Bruce, MD (Neuro-Oncology Update Course) Don O'Rourke, MD (*J Neuro-Oncology*)

**Young Neurosurgeons** Peter Dirks, MD

Washington Committee Lawrence Chin, MD

International Jun Yoshida, MD Jorg Tonn, MD Shin Jung, MD Carlos Carlotti, MD