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Tumor Section Executive Committee

## View From the Chairman



*Jeff Bruce, MD*

Greetings to all the glioma-philes out there. This will be my final newsletter as chair of the Tumor Section. I am delighted to be handing over chairman duties to Fred Lang, MD, who has been and will continue to be a great asset to the section. It has been a great privilege to work with the outstanding members of our section and in particular the Executive Committee members who often labor in obscurity while performing the vital functions of our organization. The Tumor Section is currently in great shape, and we will be progressing with many exciting developments outlined in this newsletter.

We are fortunate to be experiencing a renaissance in the field of neuro-oncology. Major advances at the clinical, translational and basic science levels, much of it due to contributions made by members of our section, have made this a time of great excitement and optimism. Interest and member involvement in neuro-oncology are at all-time highs. I am reminded of a former chairman of neurology at Columbia who once remarked, "There seem to be more people living off of brain cancer than dying from it."

The newsletter reflects many of the Tumor Section's accomplishments and is filled with useful updates provided by our stalwart committee leaders on grants, fellowships, clinical trials, awards and education. It also includes updates from our international members who have been diligently advancing the field of neuro-oncology in their native countries. Expanding our collaboration with

international organizations has been one of the section's priorities during my chairmanship. Other successful accomplishments include new published guidelines for brain metastases, exploration of an infrastructure for clinical trials, expansion of awards and fellowships, numerous practical courses in neuro-oncology-related disciplines, advancement of young neurosurgeons and support of webinars through the community collaborative initiatives.

Allen Waziri, MD, has done a great job organizing the AANS meeting in Denver, which includes a session on surgical advances for maximizing glioma resection that will highlight new advances in intraoperative imaging, fluorescence-guided tumor resection, and brain mapping. A session on the latest developments in adjuvant therapy for malignant gliomas will discuss convection enhanced delivery, stem cell therapy, virotherapy and nanoparticle technology.

In conjunction with the Society of Neuro-Oncology, we are pleased to announce our biannual tumor satellite meeting as just one example of the collaboration between the two organizations. The meeting will be held in Orange County, Calif., Nov. 17–20, 2011. This collaboration was made possible through the hard work of many people from both organizations, including Susan Chang, MD, Mike Vogelbaum, MD, Fred Lang, MD, Chas Haynes, MD, and Andy Parsa, MD, among others. I hope everyone will attend and submit an abstract to make the meeting a great success. By combining our satellite meeting with SNO's annual meeting, we will be able to concentrate our discussions and provide the most current and comprehensive information on advances in our field.

My chairmanship has been a great run. I hope to see you in Denver.

# 2011 Tumor Section Session Preview: AANS Annual Meeting

**Allen E. Waziri, MD**

As we strive for improved therapy and outcomes for patients with malignant brain tumors, neurosurgeons remain centrally positioned as members of both clinical and research efforts. To this end, the Tumor Section will host a group of neurosurgical experts during two dedicated afternoon sessions April 12–13 at the 2011 AANS meeting in Denver.

Our session on Tuesday, April 12, will begin with a series of talks from a group of expert tumor neurosurgeons entitled, “Maximizing Extent of Resection in Primary Brain Tumors: Why Would We, and How Should We?” After an introduction to the topic by Jeffrey Bruce, MD, Mitchel Berger, MD, will review his recent data focusing on outcomes for patients undergoing maximal surgical resection. Hughes Duffau, MD, will discuss his thoughts and techniques for optimizing resection and improving survival for patients with low-grade gliomas. Volcker Seifert, MD, will offer insights from his extensive experience with the use of intraoperative MRI for maximizing the extent of surgical resection, and the session will conclude with an introduction to the use of fluorescent dyes for intraoperative tumor labeling and detection by David Roberts, MD.

On Wednesday, April 13, the Tumor Section will focus on translational techniques that are nearing exploration or are

currently being explored in early clinical trials. During a session entitled, “Emerging Adjuvant Options for Patients with Malignant Gliomas,” Krystof Bankiewicz, MD, and Russell Lonser, MD, will update the group on the state-of-the-art techniques in convection-enhanced delivery. Fred Lang, MD, Isabelle Germano, MD, Maciej Lesniak, MD, and Costas Hadjipanayis, MD, will subsequently review their recent data focusing on stem cells, viruses and nanoparticles as vectors for targeting therapy against malignant brain tumors.

Each of these sessions will be followed by a series of short talks based on award-winning and highly ranked abstracts submitted by members of the Tumor Section, ranging from the prediction of glioma treatment response using tumor expression analysis to the development of techniques for improved intraoperative tumor imaging. It remains a time of great promise and potential opportunity for change in the treatment of patients with malignant brain tumors, and neurosurgeons remain critical contributors to these ongoing efforts.

## 2010 CNS Meeting Highlights

**Costas Hadjipanayis, MD**

The 2010 CNS Annual Meeting in San Francisco was a success with many contributions by the AANS/CNS Section on Tumors. Multiple awards were presented by the Tumor Section at the Top Ten Abstracts and Neurosurgical Forum sessions where great science was discussed. The Tumor Section held a special afternoon nanotechnology seminar entitled, “Cancer, Neurosurgery, and Nanotechnology—A New Triumvirate.” Several outside speakers participated in the session, discussing the development of cancer nanotechnology and potential applications in neurosurgery and neuro-oncology. The seminar was moderated by Costas G. Hadjipanayis, MD, and Atom Sarkhar, MD. Speakers included Piotr Grodzinski, MD, from the National Cancer Institute, Raghuraman Kannan, MD, editor-in-chief of *Cancer Nanotechnology: Basic, Translational, and Clinical Research*, and Shuming Nie, MD, director of the Emory University-Georgia Institute of Technology Cancer Nanotechnology Center.

Other highlights from the CNS meeting included a special dinner seminar at Harris’s Restaurant, entitled, “Controversies in the Management of Metastatic Brain Tumors.” This seminar was moderated by Tumor Section members Jonas Sheehan, MD, and Michael A. Vogelbaum, MD. This was the first time a dinner seminar was held at the annual CNS meeting. Other faculty participating in the dinner seminar included Steven N. Kalkanis, MD, Frederick Lang, MD, Cameron Brennan, MD, and Raymond Sawaya, MD.

## Society for Neuro-Oncology

**Michael Vogelbaum, MD**

Planning is well under way for the joint meeting of the Society for Neuro-Oncology (SNO) and the AANS/CNS Section on Tumors in Anaheim, Calif., later this year (Nov. 17–20). The meeting agreement, which is now signed, allows each organization to retain 100 percent of the exhibit and support revenue that it secures for the meeting. A scientific committee has been formed, jointly led by Tim Cloughesy, MD (representing SNO), and Michael Vogelbaum, MD (representing the Tumor Section), and it includes a large contingent of Tumor Section members. Special attention has been placed upon the development of educational sessions with themes of interest to neurosurgeons, including topics that are usually beyond the scope of the usual SNO program (e.g., skull base and benign tumors). The Education Day program committee leadership includes Jason Sheehan, MD, and will have a strong emphasis on radiosurgery.

Andy Parsa, MD, is leading the meeting fund-raising effort for the Tumor Section, and he and I have discussed a number of novel opportunities for sponsorship, such as hands-on workshops and a surgeons’ “lounge,” which have the potential to increase revenues for the section.

We hope that the net result of this collaboration between SNO and the Tumor Section is a program that is of high scientific and educational value to all attendees and that also provides the necessary revenues to both organizations to maintain their educational missions. I look forward to seeing my fellow Tumor Section members at the meeting.

# Tumor Section Awards

**Jonas M. Sheehan, MD, FAANS, FACS**

The Tumor Section Awards Committee continues to be active, administering 10 awards and one research grant. Most of the awards are limited to Tumor Section members, providing an additional incentive for membership. The award winners for the upcoming AANS meeting will be recognized at the Tumor Section session Tuesday, April 12, 2–5:30 p.m. Support for the awards program encourages submission of the highest quality works in neuro-oncology.

## BrainLAB Community Neurosurgery Award

The BrainLAB Community Neurosurgery Award is awarded at the annual meetings of the AANS and CNS. This award is given to a neurosurgeon practicing in a nonacademic setting with the best abstract related to central nervous system tumors. Previous AANS/CNS Section on Tumors chairs Michael McDermott, MD, and Ronald Warnick, MD, were instrumental in securing this award given through the generosity of BrainLAB. Anthony Asher, MD, of Carolina Neurosurgery and Spine Associates received the award at the 2010 CNS meeting in San Francisco for his paper, “Prospective Trial of Resected Brain Metastases Treated with Neo-Adjuvant Stereotactic Radiosurgery Prior to Resection.” Dr. Asher was awarded \$1,000.

## 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 is given at the annual meetings of the AANS and CNS. 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 winner for the 2010 CNS meeting was Doug Anderson, MD, of Loyola University Medical Center for his presentation, “Microsurgical Resection for Vestibular Schwannomas: Tumor Recurrence Rates and Clinical Outcomes in a Neurosurgical Series of 629 Patients.” The award includes a \$1,000 honorarium.

## Preuss Award

The Preuss Award, sponsored by the Preuss Foundation, is given at each of the AANS and CNS meetings to a young scientist investigating brain tumors, within 10 years of training, who has submitted the best basic science research paper. The 2010 CNS winner was Nader Sanai, MD, of the Barrow Neurological Institute for his presentation, “Neuronal Escape from the Pediatric Human



*Douglas E. Anderson, MD, left, accepts the Synthes Skull Base Surgery Award from Jeffrey Bruce, MD.*



*Jeffrey Bruce, MD, left, presents the Preuss Residents Research Award to Nader Sanai, MD.*

Subventricular Zone and Discovery of a Medial Migratory Stream.” This award has a \$1,000 honorarium.

## National Brain Tumor Society Mahaley Award

The NBTS Mahaley Award is given at each of the AANS and CNS meetings to a neurosurgery resident, fellow or attending physician who submits the best clinical study in neuro-oncology. At the 2010 CNS meeting, the award was presented to Mustafa Hatiboglu, MD, of MD Anderson Cancer Center for his paper, “Evolution of Neurosurgical Treatment for Brain Metastases over the Last 15 Years: Experience at a Large Referral Cancer Center.” He was awarded a \$1,000 honorarium.



*Mustafa Aziz Hatiboglu, MD, left, accepts the NBTS Mahaley Clinical Research Award from Jeffrey Bruce, MD.*

## American Brain Tumor Association Young Investigator Award

Sponsored by the American Brain Tumor Association, the Young Investigator Award is given at each AANS and CNS meeting to a young faculty member involved in neuro-oncology research who has demonstrated outstanding potential for future basic science research. The applicant must have been out of training for less than six years. The 2010 CNS winner was Ganesh Rao, MD, of MD Anderson Cancer Center for his abstract entitled, “Bcl-2 Promotes Malignant Progression in Glioma.” A \$2,000 honorarium accompanied this award.



*Ganesh Rao, MD, accepts the ABTA Young Investigator Award from Jeffrey Bruce, MD.*

## Integra Award

The Integra Foundation Award, sponsored by the Integra Foundation, is given at each of the AANS and CNS meetings for the best research or clinical paper submitted investigating benign brain, spinal or peripheral nerve tumors. At the 2010 CNS meeting, the winner was Brian Williams, MD, of the University of Virginia for his presentation, “Gamma Knife Radiosurgery for Parasellar Meningiomas: Long-term Results Including Complications, Predictive Factors and Progression Free Survival.” There was a monetary award of \$1,000.

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### Springer Journal of Neuro-Oncology Award

The Journal of Neuro-Oncology Award is sponsored by Springer Publishers and is presented at both the annual AANS and CNS meetings to a highly ranked abstract in either clinical or basic science as related to neuro-oncology. The 2010 CNS recipient was Randy Jensen, MD, of the University of Utah for his paper entitled, "Silencing Expression of Hypoxia Inducible Factor-1 Inhibits Intracranial Glioma Growth: Focus on Nanomolecular System of siRNA Delivery." A \$500 award and a framed certificate were given to the winner.

### Stryker Neuro-Oncology Award

The Stryker Neuro-Oncology Award is given to a high-ranking brain tumor clinical or basic science abstract submitted by a resident or medical student. The award is presented at the CNS and AANS annual meetings, and the senior author of the paper must be a member of the AANS/CNS Section on Tumors. The 2010 CNS recipient of this award was Selby Chen, MD, of the Mayo Clinic for his paper, "Gliomatosis Cerebri: Clinical Characteristics, Management, and Outcome." A monetary component of \$1,000 was included with an award certificate.



*Jonas Sheehan, right, presents the Stryker Neuro-Oncology Award to Selby G. Chen, MD.*

The AANS/CNS Section on Tumors would like to thank the award sponsors for helping to encourage submission of the highest quality work in neuro-oncology. Congratulations to the 2010 CNS Annual Meeting award winners.

### New Neuro-Oncology Committee Forming Cooperative Group: Neurosurgeon Volunteers Sought

**Frederick G. Barker II, MD**

As many Tumor Section members know, the National Cancer Institute's (NCI) Clinical Trials Cooperative Group Program is undergoing a major reevaluation and restructuring in response to the report of an Institute of Medicine (IOM) committee (<http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=12879>).

Among the priorities identified by the IOM committee was reduction of redundant administrative and support structures across multiple cooperative groups. Currently the NCI supports 10 such groups.

In response, the Cancer and Leukemia Group B (CALGB, <http://www.calgb.org>), the North Central Cancer Treatment Group (NCCTG, <http://www.ncctg.mayo.edu>), and the American College of Surgeons Oncology Group, (ACOSOG, <http://www.acosog.org>) will be merging to form an as-yet unnamed cooperative group.

While the NCCTG has an active neuro-oncology research program, CALGB has not had a neuro-oncology group, and the CNS Working Group of ACOSOG has been dormant since 2004. Eva Galanis, MD, and Kurt Jaeckle, MD, the co-chairs of the newly formed multicooperative, multidisciplinary Neuro-Oncology Committee, are seeking neurosurgical input for this new group, which held its first meeting in early March. Neurosurgical investigators from institutions that are members of CALGB, NCCTG or ACOSOG should contact Fred Barker, MD ([barker@helix.mgh.harvard.edu](mailto:barker@helix.mgh.harvard.edu)) to discuss possible opportunities for neurosurgeons in this newly formed trials group.

### Pediatric Neuro-Oncology Section

**Howard Weiner, MD**

A recent article in the New England Journal of Medicine highlighted targeting a biological pathway in pediatric brain tumor treatment ("Everolimus for subependymal giant cell astrocytomas in tuberous sclerosis," N Engl J Med 363: 19, November 2010).

The authors, Krueger et al. from Cincinnati Children's Hospital Medical Center, published their experience with 28 patients, age 3 or older, enrolled in an open-label study of the mTOR inhibitor everolimus. Mutations in either of the tuberous sclerosis genes, TSC1 and TSC2, results in constitutive upregulation of mTOR, leading to abnormal cell growth proliferation and protein synthesis. Everolimus (RAD001, Novartis) inhibits mTOR. The authors found that this treatment significantly reduced SEGA volume, and proposed that this may be an alternative therapy to neurosurgical resection.

### Important Upcoming Meeting

The Society for Neuro-Oncology is pleased to announce the 2011 Pediatric Neuro-Oncology Basic and Translational Research Conference, which will take place May 19–20, 2011, at the Loews Hotel in New Orleans, La. All abstracts will be published in Neuro-Oncology. The conference will include an outstanding program of groundbreaking research from leading experts in the field of pediatric brain tumors, plenary and poster sessions, and "Meet the Expert Sunrise Sessions." James Rutka, MD, is the scientific program chair.

# Nominating Committee Report

Michael W. McDermott, MD

At the 2010 CNS Annual Meeting, during the AANS/CNS Section on Tumors Executive Committee meeting, nominations for the position of Secretary Treasurer were solicited. Responses received that day and subsequently by e-mail showed a high response rate from the committee members.

I am pleased to announce that Fred Barker, MD, and Andy Parsa, MD, were the top two nominees and were therefore listed on the e-mail election ballot sent to members on March 3.

Results of the election will be announced at the Section on Tumors Executive Committee meeting during the AANS Meeting.

I would like to congratulate Drs. Barker and Parsa on their selection as the top two nominees as well as Drs. Linskey, Vogelbaum, Kalkanis, Markert, Curry, Liau, Aghi, Waziri, Jason Sheehan, Jonas Sheehan, Sloan, Olson, Hajapanais, and Chiocca who also received nominations.

Many thanks to Chris Philips from the AANS Executive Office for coordinating the vote and to my co-chairs of the nominating committee, Jeff Bruce, MD, and Ron Warnick, MD, for feedback during the process.

## Reproduction of Election Ballot AANS/CNS Section on Tumors March 3, 2011

Dear Doctor McDermott:

The Nominating Committee is pleased to announce that it is time once again for the Section members to elect a new Secretary-Treasurer for the two-year term of 2011–2013. As per our bylaws, nominations for this position were accepted for two candidates from our current Executive Committee. The top two nominees were selected by vote counting from the nominations received. I am pleased to announce that this year's nominees are Drs. Fred Barker and Andrew Parsa.

[Click here](#) to access summaries of the two candidates' contributions to the Section over the years. Both are worthy candidates and I urge you to vote! **Voting will be closed March 15 at 2400 hrs.** CST. The final results of the election will be announced at the upcoming AANS Business Meeting for the Section. To access the ballot, please login to <http://www.MyAANS.org> and select Balloting from the left navigation bar.

Thank you for exercising your right as a Section member to participate in this vote and best of luck to both our nominees!

Michael W. McDermott  
Immediate Past Chair, Section on Tumors  
Chair, Nominating Committee

## Membership Committee Report

Jeffrey J. Olson, MD

The AANS/CNS Section on Tumors is the leading organization of neurosurgeons with a stated special interest in the therapy of tumors involving the nervous system. The section currently has 2,248 members on its roster. This includes 559 active members, 1,495 resident members and members in International, Associate, Honorary, and Adjunct categories to accommodate the participation in section activities by as many interested individuals as possible. Additional information on membership categories is available at <http://www.tumorsection.org/membership/types.htm>.

The Tumor Section serves as the official voice of the AANS and CNS in matters related to tumors. In addition, it deals with numerous tumor-related issues including new Current Procedural Terminology codes, resident and fellowship education and research initiatives, rewarding the finest efforts with a series of awards for meritorious research. It is important that current members inform residents that they too are members of this organization so as to encourage participation and awareness of the benefits available.

The Tumor Section is dedicated to the education and training of young neurosurgeons, and an individual's entrance into an accredited North American neurosurgical residency results

in automatic enrollment in the section. Those involved in neurosurgical fellowships who wish to become members may also participate without dues payment. There is no cost for resident membership, and once residents have completed their residencies, they are notified of the opportunity to become Active members and provided with a temporary reduction in annual dues for the first year after completing their training.

### Cost

Current annual membership dues are \$150 for Active members, \$75 for International members and \$37.50 for Adjunct members.

### Membership Benefits

Benefits include semiannual newsletters, a 50 percent discount on the Journal of Neuro-Oncology, reduced registration at the section's biennial Tumor Satellite meeting (most recently held in conjunction with the Society of Neuro-Oncology) and access to the Members Only component of the website for information on clinical trials, research funding, tumor treatment guidelines and topic reviews.

# Medical Neuro-Oncology Report

**Susan M. Chang, MD**

There have been two initiatives from the medical neuro-oncology perspective relevant to the Tumor Section. The first is focused on the design and conduct of robust clinical trials to evaluate new therapies for patients with meningioma of various grades. Members of the AANS/CNS Section on Tumors, the Society of Neuro-Oncology (SNO), and the Radiation Therapy Oncology Group developed a Meningioma Working Group (MWG). The first meeting of the MWG occurred at the first meeting of the Tumor Section and the SNO in New Orleans in 2009. There was a special meningioma symposium during the annual SNO meeting in Montreal, Canada, Nov. 18–21, 2010, as well as a follow-up meeting of the MWG to review the clinical challenges and relevant avenues of clinical research. The adjuvant management of gross totally resected atypical meningioma was felt to be a potential focus for evaluation, and various clinical trial designs were proposed and discussed. In addition, the appropriate endpoints of clinical trials were reviewed. Similar to challenges addressed by the Response Assessment in Neuro-Oncology (RANO) working group for high-grade and low-grade gliomas, there will be an effort to delineate appropriate endpoints specific to therapeutic interventions and to address the lack of standardization of determining response for meningioma. This will also encompass the serial volumetric evaluation of meningioma. This effort will be led by Michael Vogelbaum, MD, with input from the multidisciplinary members of the MWG. To continue the discussions on research efforts for this disease, there will be a sunrise session, “Clinical Trial Opportunities for Meningiomas,” led by Michael McDermott, MD, at the meeting of SNO and the Tumor Section in Anaheim, Calif., this year.

The second initiative will also be launched at the upcoming meeting in Anaheim. There are known challenges to performing

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

## Clinical Research

**Christopher M. McPherson, MD**

The application cycle for the 2011 American Brain Tumor Association Clinical Research Award came to a close on Feb. 15. Fifteen outstanding applications were received and are currently under review by the award committee. The winner will be announced the afternoon of Tuesday, April 12, at the Tumor Section session during the AANS Annual Meeting. In addition, 2009 award winner Andrew Parsa, MD, from the University of California–San Francisco will present the results of his project, “HSP Immunotherapy for Recurrent Glioblastoma Patients: PI(3) Kinase Activation Predicts Poor Clinical Outcomes.” Join us in Denver for what will be an exciting and enlightening meeting.

## Skull Base Surgery Subcommittee Report

**Franco DeMonte, MD**

The 21<sup>st</sup> North American Skull Base Society (NASBS) annual meeting was held in Scottsdale, Ariz., Feb. 16–20, 2011. The program was excellent. Keynote addresses included stunning presentations on the current status of facial transplantation by Laurent Lantieri, MD, and on the emerging field of robotic skull base surgery by Bert O’Malley Jr., MD.

The next annual meeting will be held in Las Vegas, Nev., Feb. 15–19, 2012. If you haven’t been to a skull base meeting in a while, the 2012 meeting will be an excellent opportunity to discover what is novel in the field.

Also upcoming is the summer resident and fellow practical course in New Orleans, La., July 29–Aug. 1, 2011.

May 16–18, 2012, marks the 6<sup>th</sup> World Federation of Skull Base Societies meeting in Brighton, U.K.

As chair of the Skull Base Surgery Subcommittee, I encourage Tumor Section members to rediscover the NASBS. It remains a vital and unique society. As a special offer to Tumor Section members, the NASBS has agreed to waive its application fee of \$100 for AANS members who join the society by June 1, 2011.

Membership information, along with meeting announcements and calendars, are on the NASBS website at <http://www.nasbs.org>.

Also of interest is the reorganized and revamped journal, *Skull Base: An Interdisciplinary Approach*. It is listed in PubMed Central, Current Contents/Clinical Medicine, EMBASE, Excerpta Medica, Research Alert, Scopus and Scisearch. Online submissions are being accepted at <http://mc.manuscriptcentral.com/skullbase>. More information about the journal is available at <http://www.thieme.com/sb>.

# Funding Opportunities

Brain Tumor Research Funding Opportunities										
Organization	Type	Description	Award	Due Date(s)	Duration	Phone	E-mail for Questions	Website		
The Sontag Foundation	Grant	Research/Career Development	600K	03/23/2011	4 yrs	904-273-8755	kverble@sontagfoundation.org "Contact Us" page on website			
National Brain Tumor Society	Standard Grant	Basic or Translational Question	100K	LOI: rolling basis	1-2 yrs	617-924-9997	info@braintumor.org	http://www.braintumor.org		
	Advanced Grant	Basic or Translational Research	200K	LOI: rolling basis	3 yrs		"Contact Us" page on website			
	Grant	Innovative Research	150K	LOI: rolling basis	2 yrs					
	Grant	Translational	250K	March	1 yr	202-419-3140	david.sandak@abc2.org	http://www.abc2.org		
	Grant	All that works	10-50K	None	None	888-295-4740	musella@virtualtrials.com	http://www.virtualtrials.com		
Accelerate Brain Cancer Cure	Grant	Translational	80K	01/2011	2 yr	800-886-2282	researchawards@abta.org	http://www.abta.org		
	Grant	Basic Research	75K	01/2011	1 yr					
	Grant	Translational	50K	01/2011	1 yr		vogelbm@ccf.org			
	Grant	AANS/CNS Clinical Research	3K	03/14/2011	Summer		grants@abta.org			
Musella Foundation for Brain Tumor Research	Medical Student Fellowship	Research	450K	03/15/2011	3-6 yrs		Through website	http://www.jsmf.org/apply/apply.php		
	Grant	Translational	Flexible	No Deadline required	LOI					
American Brain Tumor Association	Award	Collaborative	50K	September	1 yr	828-665-6891 800-253-6530	dtraynor@pbffus.org	http://www.pbffus.org		
	Fellowship	Basic Science	40K	Check website	1 yr	267-646-0665	grants@aacr.org	http://www.aacr.org		
James S. McDonnell Foundation	Grant	Basic Science	100K	Check website	2 yrs	443-849-3729	gcohen@ghmc.org	http://www.kimmel.org		
	Grant	Translational	100K	Check website	1 yr					
	Grant	Translational & Clinical	Check website	No current opportunities	N/A		Through each of the organizations involved	http://www.braintumorfunders.org		
Pediatric Brain Tumor Foundation	Fellowship	Research	40 or 70K	October	1-2 yrs	847-378-0500	nref@aans.org	http://www.aans.org/research/fellowship		
	Fellowship	Clinical	40K	February	1 yr					
	Grant	Research	2.5K	Check website	Summer	888-566-2267	info@aans.org			
	Grant	Translational & Clinical	60K	Check website	12 mos	847-378-0500	info@aans.org	http://www.aans.org/research/fellowship/aans.asp		
AACR	Fellowship	Research	40K	01/31/2011	1 yr	N/A	okonkwodo@upmc.edu	http://www.neurotraumasection.org/fellowship.html		
	Grant	Clinical	40K	December	1 yr	414-805-5400	mwang@mcw.edu	http://www.spinesection.org/fellowships_awards.php		
Sidney Kimmel Foundation	Fellowship	Basic Science	5-30K	December	1 yr	414-805-5400	mwang@mcw.edu			
	Grant	Translational	15-30K	December	1 yr	N/A	mwang@mcw.edu			
	Grant	Translational	500	01/01/2011	N/A	N/A	zohher.ghogawala@yale.edu			
Brain Tumor Funders Collaborative	Grant	Translational & Clinical	50K	01/01/2011	N/A	N/A	zohher.ghogawala@yale.edu			
	Fellowship	Research	2K	Annual Meeting	N/A	414-805-5400	mwang@mcw.edu			
	Fellowship	Travel abroad	40K	Check website	1 yr					
	Fellowship	Basic/Applied Clinical Research	40K	01/31/2011	1 yr					
NREF	Fellowship	Research	5-30K	December	1 yr					
	Grant	Clinical	15-30K	December	1 yr					
William P. Van Wagenen	Medical Student Fellowship	Research	500	01/01/2011	N/A	N/A	zohher.ghogawala@yale.edu			
	Fellowship	Travel abroad	60K	Check website	12 mos	847-378-0500	info@aans.org	http://www.aans.org/research/fellowship/aans.asp		
	Fellowship	Basic/Applied Clinical Research	40K	01/31/2011	1 yr			http://www.spinesection.org/fellowships.html		
Codman Fellowship in Neurotrauma and Critical Care	Fellowship	Spine or Peripheral Nerve	5-30K	December	1 yr	414-805-5400	mwang@mcw.edu			
	Fellowship	Research	15-30K	December	1 yr	414-805-5400	mwang@mcw.edu			
	Fellowship	Proposal	500	01/01/2011	N/A	N/A	zohher.ghogawala@yale.edu			
	Fellowship	Clinical	50K	01/01/2011	N/A	N/A	zohher.ghogawala@yale.edu			
AANS/CNS	4-Awards	Abstract, Manuscript	2K	Annual Meeting	N/A	414-805-5400	mwang@mcw.edu			

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Brain Tumor Research Funding Opportunities									
NIH	Grant	R01	R01 New: Feb. 5, June 5, and Oct. 5 R01 renewal, resubmission, revision March 5, July 5, h Nov. 5	1-5 yrs	Website	Website	Website	Website	http://grants.nih.gov/grants/funding/submissionschedule.htm
		R21	R21 new Feb. 16, June 16, Oct. 16 R21 renewal, resubmission, revision March 16, July 16, Nov. 16						
		K12	K series new: Feb. 12, June 12, and Oct. 12						
		K22	K series: renewal, resubmission, revision March 12, July 12, Nov. 12						
Specialized Programs of Research Excellence (SPORs) in Human Cancer	Grant	Basic Translational	Max 2.5M/yr	Check website		1-5 yrs	Website	Website	http://spores.nci.nih.gov/investigator_resources/program_announcements.htm http://grants.nih.gov/grants/guide/pa-files/PAR-10-003.html
The Childhood Brain Tumor Foundation	Grant	Basic Science/Translational	25-30K	03/08/2011		1-2 yrs	301-515-2900 877-217-4166	cbtf@childhoodbraintumor.org Ms. Jeanne Young	http://www.childhoodbraintumor.org
Children's Brain Tumor Foundation	Grant	Basic Science/Translational	150K	LOI: 04/12/11 Deadline: 07/19/2011		2 yrs	212-448-9494 866-228-4673	info@cbtf.org, jfay@cbtf.org Joseph Fay	http://www.cbtf.org
Society for Neuro-Oncology International Outreach	Fellowship	Research	50K	Early September		1 yr	713-526-0269	chas@soc-neuro-onc.org Chas Haynes	http://www.soc-neuro-onc.org/en/art/46/
The Ben & Catherine Ivy Foundation	Grant	Research/Translational	N/A	Future Funding		N/A	650-324-3000	info@ivyfoundation.org	http://www.ivyfoundation.org/apply-grant
Voices Against Brain Cancer Brain Research Foundation	Grant	Research/Nonresearch	20K	Check website		1 yr	212-340-9446	grants@voicesagainstbraincancer.org	http://www.voicesagainstbraincancer.org/
	Grant	Research	40K	LOI: 12/01/10 Proposal Deadline: 03/01/2011		1 yr	312-759-5150	info@theBRF.org	http://www.thebrf.org
ThinkCure!	Grant	Collaborative Research	N/A	04/01/2011		1 yr	323-224-1360	info@thinkcure.org	http://www.thinkcure.org
American Cancer Society	Grant	Research Scholar	200K	04/01/2011 10/01/2011		1-4 yrs	800-227-2345	grants@amcancer.org	http://www.amcancer.org
	Grant	Institutional Research	90K	04/01/2011		1-3 yrs	404-329-7558		
2 Grants	2 Grants	Research Professor	80K	LOI: 02/01/2011 Deadline: 04/01/2011		0-5 yrs	404-329-7540	david.ringer@cancer.org	
	2 Grants	Clinical Research Professor	80K	LOI: 08/05/2011 Deadline: 10/15/2011		0-5 yrs			
American Institute for Cancer Research	Grant	Investigator Initiated	150K	LOI: January Deadline: 05/02/2011		2 yrs	800-843-8114	research@aicr.org	http://www.aicr.org
		Postdoctoral Award							
Bristol-Myers Squibb	Grant	Research: Basic/Translational	N/A	06/30/2011		N/A	800-332-2056	"Contact Us" page on website	http://www.bms.com
	Grant	Fellows Research	20K	03/04/2011		1 yr			
Prevent Cancer Foundation	7 Grants	Fellowship	80K	02/28/2011		2 yrs	703-836-4412 800-227-2732	Kristina.Hunken@preventcancer.org.	http://www.preventcancer.org
Cancer Research Institute	Grant	Investigator Award	200K	03/01/2011		4 yrs	212-688-7515	"Contact Us" page on website grants@cancerresearch.org	http://www.cancerresearch.org
		Postdoctoral Fellowships	141K	04/01/2011		3 yrs			
Miles for Hope Foundation	Grant	Basic Translational Innovative Research	250K	No Deadline		1 yr	727-781-4673	"Contact Us" page on website	http://www.milesforhope.org/
Tug McGraw Foundation	Grant	Qualitative Quantitative Interventional		Guidelines are currently being revised.			707-933-6445	"Contact Us" page on website	http://www.tugmcgraw.org/grants

*The Goldhirsch Foundation and the Department of Defense are no longer funding tumor-related research grants.*

# International Committee Reports

## Australia

### Charles Teo, MD

Australia continues to advance the research of brain tumors, and at last this terrible disease may be receiving the attention that it deserves. For this report I have separated the activities into state reports. I would like to acknowledge the assistance of my interstate colleagues in helping compile this comprehensive summary.

### Western Australia

#### Prof. Anna Novak

Western Australia (W.A.) continues to be active in brain tumor research. The coordinator of the Australian Genomics and Outcomes of High Grade Glioma (AGOG) project is housed in W.A. and continues to work collaboratively with investigators in New South Wales to build a biobank of tumor specimens and genomic DNA, with comprehensive clinical data. In clinical research, the main Perth neuro-oncology site, Sir Charles Gairdner Hospital, has participated in the recently closed AVAGlio study and was one of the largest recruiting sites internationally. This site has also participated in the EORTC low-grade glioma study, is participating in the CATNON trial, and will open the COGNO CABARET study shortly. In local research, a qualitative study of the needs of patients with high-grade glioma and their caregivers resulted in three publications in 2010, and a subsequent quantitative study of patient needs is ongoing. W.A. is fortunate to have a dedicated cancer nurse in neuro-oncology to assist patients and their caregivers in their difficult journey.

### Victoria

#### Kate Drummond, MD

In Victoria, researchers continue to contribute to a number of international clinical trials, including AVAGlio, CABARET and soon CATNON. Tissue and data collection is becoming a valuable research resource with the development of clinically annotated stem cell models for further research. The Victorian Comprehensive Cancer Centre, a joint venture among the Royal Melbourne Hospital, University of Melbourne, Ludwig Institute for Cancer Research, Walter and Eliza Hall Institute for Medical Research, Women's Hospital and Peter Macallum Cancer Centre, is in the advanced planning stages and will bring significant resources to Victorian neuro-oncology, including laboratory and clinical research facilities and intraoperative MRI. Victorian neurosurgeons and oncologists continue to lead and contribute to key national groups including COSA (Deputy Chair Kate Drummond, MD), COGNO (Chairman Mark Rosenthal, MD) and the SAC, and the Glioma Guidelines project (Kate Drummond, MD), the consumer version of which is almost completed.

## Queensland

### David Walker, MD

Basic science projects are under way with scientists at the Queensland Institute of Medical Research (QIMR) investigating the genetic basis of radioresistance of glioma stem cells (PhD student Y. C. Chien, Supervising Professor Martin Lavin), and genetic characterization of glioma stem cells (postdoctoral fellow Bryan Day, MD). Other studies include the following: The role of CMV in malignant glioma is being investigated, including the world's first trial of adoptive T-cell therapy for patients with recurrent GBM (with Prof. Rajiv Khanna at QIMR). The study is currently halfway through recruitment. A DC vaccine trial for newly diagnosed GBM (with Chris Schmidt, MD, and Alejandro Lopez, MD, at QIMR) will begin in 2011. The results of quadruple therapy for GBM are under review. A manuscript has been submitted for publication. Also under investigation are the social impact of brain tumors on patients and their families (with Tamara Ownsworth, MD, et al., Department of Neuropsychology, Griffith University).

## New South Wales

### Associate Professor Kerrie McDonald

It has been exactly one year since the Cure For Life Neuro-Oncology Group was established at the University of NSW. The group, headed by Kerrie McDonald, MD, has 10 members (postdoctoral and PhD). Like research groups around Australia, the group is growing stem cell cultures; however, this group's focus is growing cells from patients with recurrent tumors to gain insight into the mechanism of acquired resistance. Research of the migration and invasion of glioma cells implicated a microRNA, miR-124a, as playing a key regulatory role. These results were published in the December issue of the European Journal of Cancer. Collaboration with other researchers within NSW and around Australia is building. Specifically, new therapies are being tested; the role of lipid metabolism in glioma is being explored as

*continued on page 10*



*Great Ocean Road, Victoria, Australia*

well as epigenetic pathways and their involvement in treatment resistance. NSW continues to be involved in international clinical trials, including CENTRIC and AVAGlio. The NSW neurological community has a large number of members in National Neuro-oncology Societies, including COGNO, COSA and AGOG. AGOG is building a national biospecimen repository and demographic dataset. Four major hospitals in NSW are contributing to AGOG. The NSW Oncology Group (NSWOG) for neuro-oncology continues to make impacts on patient care. The clinical group designed brochures for patients and clinicians to provide advice when it comes to determining one's fitness to drive a motor vehicle after treatment. A letter to the editor was published in the *Journal of Neuro-Oncology* in December 2010, and the European Association of Medical Oncology has written a feature article on these brochures for its website. The inaugural Brain Cancer Action Week held in May in NSW resulted in extensive public awareness for the disease. A patient support forum, organized by NSWOG and the Cancer Council NSW, was held during that week and was attended by more than 200 patients and their families. It is hoped that this year's Brain Cancer Action Week (May 7–14) will be a national affair.

### Central America

#### Jose Edgardo Valerio-Pascua, MD

2010 was another successful year in neurosurgical oncology in the Central American region. For the first time a symposium of young neurosurgeons specializing in brain tumors took place during CLAN 2010 on Oct. 27.

In November 2010, the AANS/CNS Tumor Section participated with the Brain Tumor Society of Mexico, the Hospital Centro Medico Nacional Siglo XXI and the Neurosurgery College of Guanajuato in an international meeting with the representation of Jeffrey Bruce, MD, and Jose Valerio, MD. The meeting included the participation of Christopher Loftus, MD, Edward Benzel, MD, Nelson M. Oyesiku, MD, Chandranath Sen, MD, John C. Chiu, MD, and John Jane Jr., MD. These academic activities were with the intention of maintaining the relationship between among these societies.

The Mexican Neurosurgery National Congress will be held in June 2011 in Acapulco, Mexico. The president of this society, Gerardo Guinto, MD, has invited eight skull-base and neurosurgery oncology directors of educational programs from the United States to participate.

In Ecuador, we participated in conjunction with the Ecuadorian Oncology and Neurosurgery Society in a symposium which took place in Guayaquil and Quito Ecuador in February 2011.

In Panama, the Panama Society of Neurosurgery will hold its first International Brain Tumor meeting in Panama City April 29–30, 2011.

A network of hospitals has been created to enhance the treatment of brain tumors. The participating countries in this network are Mexico, Jamaica, El Salvador, Costa Rica, Panama, Dominican Republic, Colombia, Ecuador, Venezuela, Brazil, and the United States. The goal for this group is an interactive evaluation of brain

tumor treatment and diagnosis between hospitals using the Internet as a link for these academic interactions.

Lastly, a new clinical fellowship starting in 2012 will be established in neurosurgery, oncology and spine at Cleveland Clinic Florida.

We are very excited about the progress we made in 2010 and are looking forward to the events that are ahead in 2011 and beyond.

### China

#### Yonggang Wang, MD, PhD

The 9th National Congress of Neurosurgery was held Sept. 10–12, 2010, in the city of Jinan. More than 2,300 neurosurgeons from across China attended this meeting. Many international neurosurgical experts from the U.S., Germany, Sweden and Canada presented wonderful lectures. Due to the growing number of female neurosurgeons, a women neurosurgeons committee was founded during the meeting.

Upcoming meetings in China include the following:

- 6th Annual Meeting of the Neurosurgeon Branch of the Chinese Medical Doctor Association  
April 15–17, 2011, Nanjing, China
- 8th Meeting of the Asian Society for Neuro-Oncology and 5th Meeting of the Korean-Chinese Neuro-Oncology Society  
May 26–29, 2011, Suzhou, China; <http://asno2011.org/cn/index.html>
- Sino-German-Korean Neurosurgery Friendship Meeting  
May 26–29, 2011, Chongqing, China
- Beijing Tiantan Skull Base Meeting  
Aug. 3–5, 2011, Beijing, China
- Chinese Neurosurgical Society Annual Meeting  
Oct. 13–15, 2011, Tianjin, China; <http://www.cnsmeeting.com/2011/cn/>

### Italy

#### Francesco DiMeco, MD

Italy will be hosting the 14th Congress of the European Association of Neurological Surgeons, which will be held in Rome Oct. 9–14, 2011. The meeting will cover, among other topics in the neuro-oncology field, state-of-the-art of treatment of malignant gliomas, intraventricular tumors, management of brain metastases and intramedullary tumors. Fred Lang, MD, has been invited to the meeting to deliver a special lecture. The meeting will provide a good opportunity to strengthen the ties between the EANS Neuro-Oncology Committee (NOC) and the AANS/CNS Section on Tumors and to foster the institution of an NOC/Tumor Section liaison.

### Japan

#### Fumio Yamaguchi, MD, PhD

The website of the Japan Neurosurgical Society has launched a new page offering international information. Neurosurgeons are encouraged to submit news and other relevant information to Fumio Yamaguchi, MD, [fyamaguc@nms.ac.jp](mailto:fyamaguc@nms.ac.jp).

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

- 31st Annual Meeting of the Japanese Congress of Neurological Surgeons  
May 6–8, 2011, Yokohama, Japan; <http://www.jcns2011.jp>
- 16th Annual Meeting of the Japanese Congress for Brain Tumor Surgery  
Sept. 9–10, 2009, Yokohama, Japan; <http://square.umin.ac.jp/bts2011>
- 70th Annual Meeting of the Japan Neurosurgical Society  
Oct. 12–14, 2011, Yokohama, Japan; <http://www.jns2011.jp>
- 12th Annual Meeting of the Japan Society of Molecular Neurosurgery  
Oct. 14–15, 2011, Yokohama, Japan; <http://jsmn.umin.jp>
- 29th Annual Meeting of the Japan Society for Neuro-Oncology  
Nov. 27–29, 2011, Gifu, Japan
- 35th Annual Meeting of the Japan Society for CNS Computed Imaging  
March 2–3, 2012, Yokohama, Japan

### Nigeria

#### Okezie O. Kanu, MD, FWACS

In February 2009 the Neurosurgical Division of the Lagos University Teaching Hospital in Lagos, Nigeria, hosted a three-day program led by Nelson Oyesiku, MD, that included lectures, demonstrations and live surgeries. The program was attended primarily by neurology and neurosurgical residents and young neurosurgeons from the region. Dr. Oyesiku focused on the management of pituitary tumors and the transnasal transphenoidal approach to the sellar and parasellar regions. Before the program, only one of the attendees was performing transnasal surgery (microscopic and endoscopic). Now, a few more have started using procedure. We have started discussions with colleagues in the region to bring together more young neurosurgeons for more elaborate workshops.

We hope that Dr. Oyesiku's planned visit in August 2011 will attract more attendees from other regions and encourage more international faculty members to visit and share their experiences. (Specific dates for the 2011 program are yet to be confirmed.)

Discussion is ongoing with the Secretary-General of the West African College of Surgeons (WACS) on the use of the surgical skills center for future hands-on dissection courses. Sponsorship and funding are needed to enable us to acquire the necessary equipment for the skills center. Donors and sponsors are welcome.

The First Nigeria-Florida Neuroscience Partnership conference took place in Lagos in November 2010. Michael Finkel, MD, and his team of neurologists, neurosurgeons and interventionists from America participated in the week-long program, which had an immense impact on neuroscientists in Nigeria. We hope to hold

courses in Ghana and Zambia in the coming months.

Our committee is relatively young, and we are making efforts to attract representatives and subcommittees from north, east and central Africa for better collaboration.

### Switzerland

#### Dominik Cordier, MD

The joint effort of the neurosurgical departments of the university hospitals of Basel and Bern to establish a brain tumor bank is progressing. In the meantime, more than 200 patients are participating with tissue samples and clinical data. This work is especially valuable in examining rare types of tumors.

Other work includes the evaluation of the invasive properties of regular stem cells in comparison to glioma cells and the proteomic analysis of signaling cascades in glioma cells.

A joint project of the Department of Neurosurgery of the University Hospital of Basel and ETH Zurich is being launched to develop an intratumoral application system for pharmaceuticals.

National meetings include the first Neurospine Meeting of the Swiss Society of Neurosurgery, which will take place on March 17, 2011, and the Annual Meeting of the Swiss Society of Neurosurgery scheduled for Nov. 17–18, 2011.

### SANS Committee

#### Jason Sheehan, MD, Sarah Jost, MD

Earlier this year, the Self-Assessment in Neurological Surgery (SANS) committee completed its annual rolling update. This update entailed the introduction of 25 percent new questions to Maintenance of Certification compatible SANS products such as the general, spine and pediatrics examinations.

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

Lastly, we are always looking for Tumor Section members who will contribute SANS questions. If you are interested in providing questions or serving on the SANS committee, please contact one of us.

Jason Sheehan, MD ([jsheehan@virginia.edu](mailto:jsheehan@virginia.edu))  
Sarah Jost, MD ([scj\\_29@hotmail.com](mailto:scj_29@hotmail.com))

## Young Neurosurgeons Committee Chetan Bettegowda, MD

The AANS/CNS Section on Tumors is proud to sponsor a Young Neurosurgeons Reception at the 2011 AANS meeting in Denver. The reception will take place from 5:45 to 7:30 p.m. in Mineral Hall E of the Hyatt Regency Denver, the headquarters hotel of the AANS meeting. Bob S. Carter, MD, PhD, chief of neurosurgery at the University of California—San Diego School of Medicine, has kindly agreed to be the guest speaker on a topic to be determined at this informal event. The Young Neurosurgeons Reception is an outstanding opportunity for young brain tumor surgeons, both in training and in practice, to meet with many of the leaders in brain tumor surgery and research while enjoying great food and what is sure to be an entertaining talk from Dr. Carter.



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