Greetings, and welcome to the Spring 2015 American Association of Neurological Surgeons (AANS)/Congress of Neurological Surgeons (CNS) Section on Tumors newsletter! As I write, final arrangements are being made for the Tumor Section program at the 2015 AANS Annual Scientific Meeting. Program officers Clark Chen, MD, PhD, FAANS; and Michael Sughrue, MD, FAANS, have assembled a dynamic program, with special sessions on “Surgery for ‘inoperable’ gliomas,” featuring Fred Lang, MD, FAANS (insular gliomas); Matt Tate, MD, PhD (speech area); Sujit Prabhu, MD, FAANS (motor and sensory areas); Charlie Teo, MD (butterfly gliomas); and Jason Sheehan, MD, PhD, FAANS (radsurgery in eloquent areas and redefining neuro-oncology through gliomas), including Cameron Brennan, MD, FAANS (genomic landscape of glioblastoma); Anoop Patel, MD (intratumoral heterogeneity); Dr. Chen (fusion proteins as therapeutic targets); Andy Parsa, MD, PhD, FAANS (Immunology and genomics); and Andy Sloan, MD, FAANS (clinical trials). In addition, there will be abstract sessions and the Bittner lecture, to be presented Monday afternoon by John Sampson, MD, PhD, FAANS.

Immediately preceding the 2015 AANS Annual Scientific Meeting, on Friday and Saturday, May 1-2, 2015, will be the Section’s 11th Biennial Satellite Symposium, coordinated by meeting chair Jonas Sheehan, MD, FAANS; Scientific Chairs Orin Bloch, MD; and local arrangements chair, Jonathan Sherman, MD, FAANS. Special sessions will focus on technological advances in glioma surgery, molecular advances in gliomas, management of brain metastases, and surgically based clinical trials; the keynote lecture will be delivered by Michael Taylor, MD, PhD. A new feature will be breakfast breakout sessions for young attendees, featuring Nino Chiocca, MD, PhD, FAANS (Starting a Research Lab); Dr. Parsa (Clinical Trial Involvement), and Ed Laws, MD, FAANS (When do you need a fellowship?), as well as sponsored evening non-CME programs on Genomic Characterization of Brain Tumors To Guide Personalized Care and Innovations in Surgical Neuronavigation. Finally, the section will celebrate the 30th anniversary of its founding with a gala banquet to be held on the top level of the Newseum, with award presentations, catering by Wolfgang Puck, and renowned views of the U.S. Capitol Building. Seating will be limited at the banquet, so make plans early to attend.

To highlight some other recent section developments, the 2015 AANS Annual Scientific Meeting will mark the first award of the Brian D. Silber Prize, honoring the best abstract at the AANS meeting each year on spine tumor research. The prize is generously supported by the Silber Fund for spine tumor research; thanks to Manish Aghi, MD, PhD, FAANS (Awards); Allen Waziri, MD, FAANS; and Will Curry, MD, FAANS (Development) for making this possible. Jason Heth, MD, FAANS, is updating our section bylaws to bring us into the 21st century. And criteria for surgical neuro-oncology infolded fellowships during residency will be developed by a team of Jeff Weinberg, MD, and local arrangements chair, Jonathan Sherman, MD, FAANS. Special sessions will focus on technological advances in glioma surgery, molecular advances in gliomas, management of brain metastases, and surgically based clinical trials; the keynote lecture will be delivered by Michael Taylor, MD, PhD. A new feature will be breakfast breakout sessions for young attendees, featuring Nino Chiocca, MD, PhD, FAANS (Starting a Research Lab); Dr. Parsa (Clinical Trial Involvement), and Ed Laws, MD, FAANS (When do you need a fellowship?), as well as sponsored evening non-CME programs on Genomic Characterization of Brain Tumors To Guide Personalized Care and Innovations in Surgical Neuronavigation. Finally, the section will celebrate the 30th anniversary of its founding with a gala banquet to be held on the top level of the Newseum, with award presentations, catering by Wolfgang Puck, and renowned views of the U.S. Capitol Building. Seating will be limited at the banquet, so make plans early to attend.

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FAANS; Jennifer Moliterno Gunel, MD; Chris Farrell, MD; and Ian Dunn, MD, FAANS, under the supervision of Mark Linskey, MD, FAANS. Looking forward to the fall, the CNS 2015 program will be coordinated by Michael Lim, MD, FAANS, with a focus on management of recurrent malignant gliomas. The third Ab Guha Award will be presented at a CNS plenary session to awardee John Sampson, MD, PhD, FAANS.

Finally, this contribution marks the end of my term as Tumor Section chair. It has truly been a privilege to work with each member of the executive committee during the past two years, and I would like to thank each one (especially Andy Parsa) for all their help, and their time away from practice and family. It doesn't seem that long since incoming chair, Ray Sawaya, MD, FAANS, first asked me to get involved with the section, and I've learned so much from each chair since then, especially from Mike McDermott, MD, FAANS; and Fred Lang, MD, FAANS. My thanks to each.

Under incoming chair Dr. Parsa, and secretary-treasurer Steve Kalkanis, MD, FAANS, our section will be stronger than ever. I look forward to watching it grow, as we all learn more each year toward helping our patients lead full, productive lives. See you in Washington, D.C.!

Frederick G. Barker II, MD, FAANS
Chair, Section on Tumors
A better understanding of the aberrant signaling pathways that drive cancer formation and progression provides a rationale for targeted based treatment in oncology. This therapeutic strategy, utilizing concepts of precision medicine with more specificity against cancer cells, has been successful in malignancies, such as B cell malignancies (CD20+), leukemia (Phi+), breast cancer (her-2-neu), melanoma (BRAF) and lung cancer (EGFR). Many tumor-targeted monoclonal antibodies and tyrosine kinase inhibitors are approved for various cancers; however despite initial responses, resistance mechanisms limit the efficacy. Similar targeted approaches in the treatment of glioblastoma have unfortunately not translated into a survival benefit as demonstrated by the negative clinical trials of agents targeting the vascular endothelial growth factor, epidermal growth factor and the mTOR pathway. There are many potential reasons for this, including lack of selection of the appropriate patient population, intra-tumoral heterogeneity and inadequate drug distribution to the tumor. Several ongoing studies are evaluating therapies selected for specific tumor characteristics, e.g. targeting of EGFRVIII tumors, BRAF-mutated tumors and IDH-mutated tumors, in the hope that this personalized approach will translate into successful treatments.

Recently, a paradigm shift utilizing drugs that target the immune cells rather than cancer cells have emerged. Certain proteins and receptors (immune check point inhibitors) on T cells can affect their immune function. Immunotherapy using checkpoint inhibition is a different treatment approach to chemotherapy and targeted agents. Instead of directly acting on the tumor to induce tumor cell death, checkpoint inhibitors enhance or de novo stimulate antitumor immune responses to eliminate cancer cells. Ipilimumab, a monoclonal antibody against cytotoxic T-lymphocyte-associated antigen 4 (CTLA-4), was the first approved checkpoint inhibitor with approximately 20 percent of ipilimumab-treated patients with refractory melanoma achieving long-term survival. Also approved for melanoma are the programmed death 1 (PD-1) inhibitors pembrolizumab and nivolumab. These are monoclonal antibodies that bind to the PD-1 receptor and block its interaction with the ligands PD-L1 and PD-L2 expressed on tumor cells, thereby releasing PD-1 pathway-mediated inhibition of the immune response. The goal of this approach is to stimulate an anti-tumor immune response to the patient’s individual tumor. One of the important aspects in the use of these agents is the expected toxicity profile that includes clinically significant immune-mediated adverse reactions, such as pneumonitis, colitis, hypophysitis, hyperthyroidism, hypothyroidism, nephritis and hepatitis. This novel approach that targets molecules involved in the immune tolerance of cancer cells, rather than oncogenic drivers or antigens expressed by cancer cells, is currently being evaluated in glioblastoma.
Tumor Section Awards Update

Manish K. Aghi, MD, PhD, FAANS

The Tumor Section Awards Committee continues to actively develop the most robust awards program for outstanding research of any of the American Association of Neurological Surgeons (AANS)/Congress of Neurological Surgeons (CNS) Joint Sections. We are thrilled to have launched two new awards within the past year:

1. Columbia Softball Charity Award — given to the best pediatric tumor abstract submitted by a resident or faculty member who is a member of the Section on Tumors will be given at each AANS/CNS annual meeting, with the recipient receiving an honorarium in the amount of $1,000. The first award was given at the 2014 CNS meeting, and the second will be given at the 2015 AANS Annual Scientific Meeting (see winners listed below). The section would like to thank Fred Barker, MD, FAANS; Jeff Bruce, MD, FAANS; and Rich Anderson, MD, FAANS, for putting together the plan to use a portion of the proceeds from the annual charity softball tournament to sponsor this award.

2. Brian D. Silber Award — given to the best abstract related to vertebral column or spinal cord tumors in the amount of $1,000 at the AANS Annual Scientific Meeting. The first award will be given at the 2015 AANS Annual Scientific Meeting (see winner listed below). The section would like to thank the family of Brian D. Silber, who, at age 28 in 1996, passed away of a malignant spinal cord tumor, for its generous support of this award.

After recognizing nine award winners at the 2014 CNS annual meeting, the section will be recognizing 12 award winners and one named lectureship at the 2015 AANS Annual Scientific Meeting. Most of the awards are limited to Tumor Section members, providing an additional incentive for membership. Award winners will present their work throughout the AANS meeting and will be honored at a photo session before the Tumor Section Session on Tuesday, May 5, 2015 at 1:30p.m. Support for the awards program encourages submission of the highest-quality works in neuro-oncology.

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 Corp. The winner for the 2014 CNS meeting was Lukas Andereggen, MD, of Bern University Hospital in Switzerland, for his presentation, “Long-term follow-up of male patients with prolactinomas: Is bone densitometry necessary?” The winner at the 2015 AANS Annual Scientific Meeting will be William Couldwell, MD, PhD, FAANS, of the University of Utah for his presentation, titled “Outcomes after Surgical Treatment of Meningioma-associated Proptosis.” 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 annual meetings to a young scientist investigating brain tumors within 10 years of training who has submitted the best basic science research paper. The winner at the 2014 CNS meeting was Ricky Raj Singh Kalra, MD, of the University of Utah, for his presentation, “Leptomeningeal Dissemination Cascade in Medulloblastoma.” The winner at the 2015 AANS Annual Scientific Meeting will be Wajd N. Al-Holou, MD, of the University of Michigan for his presentation, titled “Genetic Mechanisms of Recurrence in Glioblastoma Delineated by RNA Sequencing.” 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. The winner at the 2014 CNS meeting was Cleopata Charalampaki, MD, PhD, of University of Graz, Austria, for her presentation, “Confocal laser endomicroscopy for real time histomorphological diagnosis: Our clinical experience with 150 brain and spinal tumor cases.” The winner at the 2015 AANS Annual Scientific Meeting will be Brian Nahed, MD, PhD, of Massachusetts General Hospital for his presentation, “Circulating Tumor Cells in Glioblastoma Patients Demonstrate Mesenchymal Expression.” The award carries a $1,000 honorarium.

Integra Foundation 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 2014 CNS meeting, the winner was Derek G. Southwell, MD, PhD, of the University of Pennsylvania for his presentation, “The role of Diffusion Tensor Imaging in the investigation of brain tumors.” The award includes a $1,000 honorarium.

Manish K. Aghi, MD, PhD, FAANS

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Integra Foundation Award
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University of California San Francisco (UCSF) for his presentation, titled “Intraoperative Mapping During Repeat Awake Craniotomy Reveals the Functional Plasticity of Adult Cortex.” The winner at the 2015 AANS Annual Scientific Meeting will be Charles Lee, BS, of University of Rochester for his presentation, titled “Surgeon Volume Impacts Cost of Care in Pituitary Surgery.” The award carries a monetary honorarium of $1,000.

Springer Journal of Neuro-Oncology Award
The Journal of Neuro-Oncology Award is sponsored by Springer Publishers and is presented at both the AANS and CNS annual meetings to a highly ranked abstract in either clinical or basic science as related to neuro-oncology. The winner at the 2014 CNS meeting was Seunggu J. Han, MD, of UCSF for his presentation, “The effect of timing of radiotherapy (RT) in patients with newly-diagnosed glioblastoma multiforme (GBM) receiving Temozolomide (TMZ): an analysis based on the UCSF experience.” The winner at the 2015 AANS Annual Scientific Meeting will be Fred Lang, MD, FAANS, of MD Anderson Cancer Center, for his presentation, "Phase I Clinical Trial of Oncolytic Delta-24-RGD (DNX-2401) with Biological Endpoints: Implications for Viro-Immunotherapy.” A $500 award and a framed certificate are given to each of the winners.

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 winner at the 2014 CNS meeting was Sabih Tariq Effendi, MD, of MD Anderson Cancer Center for his presentation, “Insular Glioma Resection: The MD Anderson Experience.” The winner at the 2015 AANS Annual Scientific Meeting will be Darryl Lau, MD, of the University of California San Francisco (UCSF) for his presentation, “A prospective phase II clinical trial of 5-aminolevulinic acid to correlate intraoperative fluorescence intensity with histologic cellularity.” A monetary component of $1,000 is included with an award certificate.

Columbia Softball Charity Award
The “Columbia Softball Charity Award” will be given to the best pediatric tumor abstract submitted by a resident or faculty member who is a member of the section on tumors at each AANS/CNS meeting. Current Section on Tumors chair Dr. Barker, previous Section on Tumors chair Dr. Bruce, and pediatric neurosurgeon Dr. Anderson from Columbia University were instrumental in putting together a plan to use a portion of the proceeds from the annual charity softball tournament to sponsor this award. The first award was given at the 2014 CNS meeting to Xuezhe Han, MD, PhD, of Children’s Hospital in Boston for his presentation, titled “Urinary Biomarkers Identify Pediatric Brain Tumors Non-invasively and Correlate with Prognostic Risk Factors.” The second award will be given at the 2015 AANS Annual Scientific Meeting to Jamie Purzner, MD, of Stanford University for his presentation, titled “Epigenetic Determinants of Oncogenic Susceptibility in Medulloblastoma Precursor Cells.” The award carries an honorarium of $1,000.

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 or international setting with the best abstract related to central nervous system tumors. Previous AANS/CNS Section on Tumors chairs Michael McDermott, MD, FAANS; and Ronald Warnick, MD, FAANS, were instrumental in securing this award, given through the generosity of BrainLAB. At the 2014 CNS meeting, the award was given to Stephen J. Price, BSc, MBBS, FRCS, PhD, of The University of Cambridge in England for his presentation, “IDH-1 mutated glioblastomas have a less invasive phenotype than IDH-1 wild type glioblastomas: a diffusion tensor imaging study.” At the 2015 AANS Annual Scientific Meeting, the award will be given to Konstantinos N. Fountas, MD, PhD of the University of Thessaly, University Hospital of Larissa, Greece for his presentation, titled “Preoperative DTI, Intraoperative Visual Evoked Potentials, and Direct Cortical/Subcortical Stimulation for Visual Pathway Identification.” The award carries a $1,000 honorarium.

American Brain Tumor Association Young Investigator Award
Sponsored by the American Brain Tumor Association (ABTA), 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. At the 2014 CNS meeting, the award was given to Brian V. Nahed, MD, of Massachusetts General Hospital. The second award will be given at the 2015 AANS Scientific Meeting to Xuezhe Han, MD, PhD, of Children’s Hospital in Boston for his presentation, titled “Urinary Biomarkers Identify Pediatric Brain Tumors Non-invasively and Correlate with Prognostic Risk Factors.” The award carries an honorarium of $1,000.

continued on page 6
Awards continued from page 5

Hospital, for his presentation, titled “Circulating Tumor Cells in Patients with Glioblastoma.” At the 2015 AANS Annual Scientific Meeting, the award will be given to Gelareh Zadeh, MD, PhD, of the University of Toronto for her presentation, titled “Impact of GBM Microenvironment on Expression Profile of Bone Marrow Derived Progenitor Cells.” A $2,000 honorarium accompanied this award.

Leksell Radiosurgery Award
This award, presented at each AANS Annual Scientific Meeting since 2009, is given for the best paper on stereotactic radiosurgery related to brain tumors. The award comes with a monetary component of $2,000. At the 2014 AANS Annual Scientific Meeting, the award was given to Isabelle M. Germano, MD, FAANS, of the Mount Sinai Hospital, for her presentation, “Clinical Outcome and Risk of spine deformity and vertebral compression fracture after Spine radiosurgery.” At the 2015 AANS Annual Scientific Meeting, the award will be given to Deborah Marshall, BA, of University of California at San Diego (UCSD) for her presentation, “Survival Patterns of Patients with Cerebral Metastases after Multiple Rounds of Stereotactic Radiosurgery (SRS).”

Brian Silber Award
This award, presented at each AANS Annual Scientific Meeting, is given for the best abstract related to vertebral column or spinal cord tumors. The inaugural award will be given at the 2015 AANS Annual Scientific Meeting to Claudio Tatsui, MD, of MD Anderson, for his presentation, “Laser Interstitial Thermotherapy as an Alternative to Separation Surgery in the Management of Spinal Metastasis.” A $1,000 honorarium will accompany the award.

Ronald L. Bittner Award
The Ronald Bittner Award is endowed by Mrs. E. Laurie Bittner in memory of her husband, Ronald L. Bittner. It is awarded to the best abstract paper submitted to the AANS meeting on brain tumor research by a resident or junior faculty member. This award includes a $1,000 honorarium. At the 2014 AANS Annual Scientific Meeting, the award was given to Shawn Hervey-Jumper, MD, of UCSF, for his presentation, “Awake craniotomy to maximize glioma resection: methods and technical nuances with 561 patients.” At the 2015 AANS meeting, the award will be given to Yan Michael Li, MD, PhD, of University of Rochester, for his presentation, “The influence of maximum safe resection of T1 contrast-enhancing tumor and T2 FLAIR abnormality on survival in 1229 glioblastoma patients.”

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 2015 AANS Annual Scientific Meeting award winners.

Section Lectureships

Bittner Lecture
In addition to the Ronald Bittner Award, the Bittner Family Foundation sponsors an annual Bittner Lectureship awarded by the AANS at its annual meeting. The lectureship is awarded to an established investigator, to be presented during the main scientific program component of the AANS Annual Scientific Meeting. Selection of the Bittner Lecturer is made by the Senior Scientific Program Committee of each AANS annual meeting. At the 2014 AANS annual meeting, the Bittner Lecture was delivered by Fred Lang, MD, FAANS, of MD Anderson Cancer Center. At the 2015 AANS Annual Scientific Meeting, the Bittner Lecture will be delivered by John Sampson, MD, PhD, FAANS, of Duke University

The Abhijit Guha Award
The Abhijit Guha Award and Lecture are jointly sponsored by the Section on Tumors and the Society for Neuro-Oncology (SNO) and given annually alternating between the SNO and Tumor Section meetings. The 2014 award was given at the SNO meeting in November 2014 to Ken Aldape, MD, with the next award to be given at the 2015 CNS meeting.
As it becomes more and more evident that the greater extent of tumor resection improves survival of patients with infiltrating gliomas, the question that becomes relevant is, “Where are the limits of surgery, and can they be expanded?” The first part of the scientific program focuses on surgery for gliomas located in difficult locations, and invites surgeons with significant expertise in tackling these challenging and seemingly “inoperable” brain tumors to discuss techniques such as awake mapping, functional imaging and advanced surgical methods for removing as much of these tumors as possible. Our experts and their topics will be as follows:

- Insular Gliomas — Fred Lang, MD, FAANS
- Gliomas in eloquent speech areas — Matthew Tate, MD, PhD
- Gliomas in eloquent motor/sensory areas — Sujit Prabhu, MD, FAANS
- Butterfly Gliomas — Charlie Teo, MD
- Radiosurgery for gliomas in eloquent areas — Jason Sheehan, MD, PhD, FAANS

For the second part of the scientific program, we will then switch gears to highlight the redefining of surgical neuro-oncology through genomics. Historically, tumor physiologies are studied using various in vitro and in vivo model systems, including tissue cultured cells, genetically modified murine models, and patient-derived xenograft models. Until recently, the pertinence of findings derived from these systems to clinical tumor physiology remains poorly defined. With the advent of high-throughput sequencing technologies, it is now possible to profile tumor physiologies as they exist in the human body. Insights gained from these studies have begun to reshape our understanding of glioblastomas, as well as our strategies for therapeutic management and biomarker development. The goal of the session is to highlight recent advances in these regards and to present findings fundamentally impact neurosurgical oncology.

The invited speakers are neurosurgeons who have contributed to these pioneering works. First, Cameron Brennan, MD, PhD, FAANS (Memorial Sloan Kettering Cancer Center), will review his Cell publication¹ that defined the emerging molecular taxonomy of glioblastoma. The ensuing presentation by Anoop Patel, MD, PhD (Massachusetts General Hospital), will highlight the complexity of the glioblastoma eco-system as described in his Science publication.² The third presentation by Clark Chen, MD, PhD, FAANS (University of California, San Diego), will review his paper in Genome Research³ describing therapeutic opportunities associated with the identification and targeting of recurrent fusion proteins in glioblastoma. Following this presentation, Bob Carter, MD, PhD, FAANS (University of California, San Diego), will review his landmark Nature Cell Biology⁴ manuscript that demonstrates how genomic interrogation of glioblastoma-secreted exosomes impacts our current standard of care. The fifth speaker, Andrew Parsa, MD, PhD, FAANS (Northwestern University), will present his Nature Medicine paper⁵ and describe the impact of genomics on immunotherapy. The final speaker, Andrew Sloan, MD, PhD, FAANS (University Hospitals), a leader in The Cancer Genome Atlas (TCGA) project, will discuss the impact of genomics on glioblastoma clinical trial design and neurosurgical practice. It is readily apparent from the session line-up that neurosurgeons have made pivotal contributions in the field of cancer genomics and will continue to shape the future of neuro-oncology. The session will celebrate these past accomplishments, as well as provide a forum of discussion of the future to come.

References


There was a near-record number of U.S. and international attendees who enjoyed a full palette of educational Tumor Section activities at the Congress of Neurological Surgeons annual meeting, Oct. 18-22, 2014, in Boston.

In addition to the numerous tumor-related practical courses, luncheon and dinner seminars, oral and electronic posters of neurosurgical forum were organized and presented by many of our esteemed and hard-working Tumor Section members, the following Tumor Section components of the program were highlighted.

On Monday, Oct. 20, 2014, from 7-8:30 a.m., the Tumor Section had a room-filling audience for the sunrise scientific session focusing on “Emerging Technologies in Tumor Visualization and Therapy,” with talks from Michael A. Vogelbaum, MD, PhD, FAANS; Aaron A. Cohen-Gadol, MD, FAANS; Nader Sanai, MD, FAANS; David W. Roberts, MD, FAANS; Edward R. Laws, MD, FAANS; Steven N. Kalkanis, MD, FAANS; and John S. Kuo, MD, PhD, FAANS.

That afternoon, the plenary controversy session showcased debates by Andrew T. Parsa, MD, PhD, FAANS; and Ossama AI-Mefty, MD, FAANS, on “Extent of Skull Base Tumor Resections”; and by Anthony L. Asher, MD, FAANS; and Douglas S. Kondziolka, MD, FAANS, on “Neoadjuvant Radiosurgery Followed by Resection of Brain Metastases: Yes vs. No.” Then, a consensus session featuring “Management of gliomas” was presented by Mitchel S. Berger, MD, FAANS; Nino Chiocca, MD, PhD, FAANS; Andrew E. Sloan, MD, FAANS; and Susan Chang, MD.

On Tuesday, Oct. 21, 2014, the Tumor Section award-winning and top-scoring tumor abstracts were presented to a terrific turnout. The afternoon consensus session discussed “Management of Metastatic Tumors of the Spine” by Ziya L. Gokaslan, MD, FAANS; Jason P. Sheehan, MD, PhD, FAANS; Timothy C. Ryken, MD, FAANS; and John E. O’Toole, MD, FAANS. An inspirational talk by Dr. Chiocca at a convivial gathering of the Young Tumor Neurosurgeons reception occurred that evening.

At the Wednesday morning general scientific session, Fred Barker, MD, FAANS, discussed “Tumor Trials – Are we better off today than 5 years ago?”

Our gratitude to the many wonderful and hard-working Tumor Section members who contributed greatly to a successful meeting. We look forward to gathering once again with Tumor Section colleagues at the upcoming Biennial Tumor Section Satellite Symposium and American Association of Neurological Surgeons Annual Scientific Meeting in Washington, D.C. in May!

Tumor Section Membership Committee
Randy Jensen, MD, PhD, FAANS

Membership in the American Association of Neurological Surgeons (AANS)/Congress of Neurological Surgeons (CNS) Section on Tumors currently includes more than 2,000 members. Our section has a very large resident and fellow contingency that continues to grow significantly. This is in large part due to the section’s waiving membership dues for resident and fellow members. We have reached out to international resident members and let them know that membership in the AANS can also include Tumor Section membership if they are interested. They can join with no annual dues like North American residents. At the section’s executive meeting in fall a vote for reduced membership dues for members living in developing countries (defined on the AANS website) was sustained. Furthermore, at that same meeting in fall, it was decided to allow for medical student membership in the Tumor Section. We are laying the groundwork for this to begin soon. As has been our tradition, we will continue to collaborate with the Young Neurosurgeons Committee to host receptions at each of the national meetings of the AANS and CNS. We expect each of these events to bring new opportunities for collaboration, education and social interaction with residents, fellows, younger neurosurgeons and our many colleagues from around the world with interest in neurosurgical oncology.
Clinical Trials

Daniel Cahill, MD, PhD, FAANS; and Michael Vogelbaum, MD, PhD, FAANS

Each issue of the Section on Tumors Newsletter will feature a more in-depth look into two clinical trials, one sponsored by the Alliance for Clinical Trials in Oncology and the other by the Radiation Therapy Oncology Group. The focus will be on those trials that may be of particular interest to neurosurgeons.

NRG Oncology: ROTG 1470 Endorsed Study

NRG Oncology: RTOG 1470 Endorsed Study - Alliance A071101: A Phase II Randomized Trial Comparing the Efficacy of Heat Shock Protein-Peptide Complex-96 (HSPPC-96) (NSC #725085, ALLIANCE IND# 15380) Vaccine Given With Bevacizumab Versus Bevacizumab Alone in the Treatment of Surgically Resective Recurrent Glioblastoma Multiforme (GBM)

In 2014, the National Surgical Adjuvant Breast and Bowel Project (NSABP), the Radiation Therapy Oncology Group (RTOG), and the Gynecologic Oncology Group (GOG) successfully unified as a National Cancer Institute (NCI)-funded cancer clinical cooperative group known as “NRG Oncology.” The cooperative group’s federal research activities are now managed through the NRG Oncology Operations Center. The legacy RTOG is currently leading two glioma clinical trials that are open for recruitment (http://www.rtog.org/ClinicalTrials/ProtocolTable.aspx).

Here, we highlight one study for recurrent glioblastoma patients, RTOG1470/A071101, which has particular relevance for neurosurgeons. This is an NRG/RTOG-endorsed study led by the Alliance for Clinical Trials in Oncology. The protocol is a randomized phase II study of vaccine therapy (termed HSPPC-96) combined with bevacizumab versus bevacizumab alone in patients with recurrent glioblastoma that can be removed by surgery. The primary objective is to determine whether there is an overall survival advantage of HSPPC-96 administered with bevacizumab, given concomitantly or at the point of progression, in comparison with bevacizumab alone. The protocol notes, “Patients must undergo surgery within 28 days from pre-registration. Upon confirmation of adequacy of tissue for vaccine manufacture and ≥ 90 percent resection by central radiology review, patients will be randomized to one of three treatment arms.” Importantly, from a a prior therapy perspective, eligibility criteria note there should be:

1) No radiotherapy within 90 days prior to pre-registration,
2) No prior treatment with any anti-angiogenic agent targeting the VEGF pathway including but not limited to bevacizumab, cediranib, vandetanib, sunitinib, pazopanib, aflibercept, or sorafenib,
3) No prior treatment with HSPPC-96 or other investigational immunotherapy,
4) Must have received prior treatment with radiotherapy and temozolomide for histologically confirmed GBM at initial diagnosis,
5) No tumor directed therapy for most recent progression, and
6) No prior BCNU wafers (Gliadel®).

The principle investigator of this study is Andrew Parsa, MD, PhD, FAANS, the current secretary-treasurer (and incoming chair) of the AANS/CNS Joint Section on Tumors. Neurosurgeons are key contributors for patient enrollment in this trial, through the identification of glioblastoma patients who, at recurrence, are surgically resectable to ≥ 90 percent resection, with sufficient viable tissue for vaccine construction.
Clinical Trials

J. Bradley Elder, MD, Liaison to Alliance for Clinical Trials in Oncology

Report from the Alliance for Clinical Trials in Oncology — February 2015

The American Association of Neurological Surgeons (AANS)/Congress of Neurological Surgeons (CNS) Section on Tumors has implemented a collaboration with the Alliance for Clinical Trials in Oncology to facilitate cooperative efforts between neurosurgeons, neuro-oncologists and radiation oncologists at the national level in an effort to more efficiently support neuro-oncology clinical trials. Each issue of the Tumor News will highlight a clinical trial that is being sponsored by the alliance or presented at one of the semi-annual meetings that may be of interest to neurosurgeons. Additional information regarding the alliance is available on its website, allianceforclinicaltrialsinoncology.org.

Past report highlights have included a trial for recurrent glioblastoma, resected brain metastases and anaplastic glioma:

- A Phase II Randomized Trial Comparing the Efficacy of Heat Shock Protein-Peptide Complex-96 (HSPPC-96) (NSC #725085, ALLIANCE IND # 15380) Vaccine Given With Bevacizumab Versus Bevacizumab Alone in the Treatment of Surgically Resectable Recurrent Glioblastoma Multiforme (GBM).
  - PI: Andrew T. Parsa, MD, PhD; Northwestern University Medical Center
- Clinical Trial: A Phase III Trial of Post-Surgical Stereotactic Radiosurgery (SRS) Compared With Whole-Brain Radiotherapy (WBRT) for Resected Metastatic Brain Disease NCT01372774 (Alliance ID: N017C)
  - PI: Paul D. Brown, MD; M.D. Anderson Cancer Center
- Phase III Intergroup Study of Temozolomide Alone Versus Radiotherapy With Concomitant and Adjuvant Temozolomide Versus Radiotherapy With Adjuvant PCV Chemotherapy in Patients With 1p/19q Co-deleted Anaplastic Glioma
  - PI: Kurt Jaeckle, MD; Mayo Clinic

The clinical trial highlighted in this report involves patients with recurrent glioblastoma and is titled:

- Phase I/Comparative Randomized Phase II Trial of TRC105 Plus Bevacizumab Versus Bevacizumab in Bevacizumab-Naïve Patients With Recurrent Glioblastoma Multiforme

This clinical trial will enroll patients with recurrent glioblastoma who have not received prior bevacizumab therapy. The phase I portion of the trial (which closed to accrual as of 1/14/14) aims to determine the maximum tolerated dose of anti-endoglin chimeric monoclonal antibody TRC105 in combination with bevacizumab.

In the phase II portion of the study, patients are randomized to one of two treatment arms:

- Arm 1: Bevacizumab + TRC105. Patients receive Bevacizumab on day 1 and TRC105 on days 8 and 11 of course 1. On all subsequent 14 day courses, the TRC105 is administered on days 1 and 8. Courses continue repeating every 14 days until disease progression or unacceptable toxicity.
- Arm 2: Bevacizumab alone. Patients receive bevacizumab on day 1 of each 14 day course, as in arm 1. Courses continue repeating every 14 days until disease progression or unacceptable toxicity.

Primary objectives:

- Phase I: Determine the maximum tolerated dose of TRC105 combined with bevacizumab; assess safety and adverse events of TRC105 in combination with bevacizumab (closed to accrual)
- Phase II: Determine the efficacy of TRC105 in combination with bevacizumab in comparison to bevacizumab alone measured by progression free survival.

Secondary objectives:

- Compare six-month progression-free survival between TRC105 + bevacizumab versus bevacizumab alone
- Compare overall survival between TRC105 + bevacizumab versus bevacizumab alone
- Compare impacts of treatment on quality of life using European Organization for Research and Treatment of Cancer (EORTC) Quality of Life questionnaire (QLQ)-C15-Palliative Care (PAL) and QLQ-brain neoplasm (BN)20 Patient Questionnaires.

This trial is open at 267 centers in the United States and Canada. The PI is Evanthia Galanis, MD, at Mayo Clinic. Further information regarding this clinical trial can be obtained from allianceforclinicaltrialsinoncology.org or clinicaltrials.gov. A list of ongoing trials sponsored by the alliance, current as of September 2014, is attached.

The spring Neuro-Oncology meeting is Friday, May 15, 2015, in Chicago. For details regarding the meeting, please contact myself or Ian Parney, MD, PhD, FAANS.
### Neuro-Oncology

**LEGEND**

Study Status:  P = Pre-Activated  A = Active  S = Suspended  
CTSU Section:  P = Pending  X = Not on menu  A = Alliance  C = CALGB  N = NCCTG  Z = ACOSOG  
OPEN Registration System:  Y = Available  P = Pending  X = Not in system

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<thead>
<tr>
<th>Protocol Number</th>
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<td>A phase II randomized trial comparing the efficacy of heat shock protein — peptide complex — 96 (HSPPC — 96) (NSC #725085, Alliance IND# 15380) vaccine given with bevacizumab versus bevacizumab alone in the treatment of surgically resectable recurrent glioblastoma multiforme (GBM)</td>
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<td>Phase III intergroup study of temozolomide alone versus radiotherapy with concomitant and adjuvant temozolomide for patients with 1p/19q codeleted anaplastic glioma</td>
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<td>NCCTG N107C</td>
<td>A phase III trial of post-surgical stereotactic radiosurgery compared with whole brain radiotherapy (WBRT for resected metastatic brain disease)</td>
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<td>NCCTG N1174</td>
<td>Phase I/comparative randomized phase II trial of TRC105 plus bevacizumab versus bevacizumab in bevacizumab-naive patients with recurrent glioblastoma multiforme</td>
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Last Updated: 09/15/2014
Over the past six months, the International Committee was involved in numerous scientific meetings. Particularly worth mentioning is the 6th Educational Course of the Asian Congress of Neurological Surgeons (ACNS) in Chitwan, Nepal, on Feb. 10-12, 2015. The ACNS, one of the largest neurosurgical world societies with more than 40 member countries, strives to raise the standard of neurosurgery in Asia. Established in the 1990s by Hiroshi Kanno, MD, PhD, under the current leadership of Yoko Kato, MD, the organization has grown and started practical courses to give the opportunity to young neurosurgeons to learn from the masters, without the financial burden to travel abroad. This year’s meeting, chaired by Professor Iype Cherian of the College of Medical Sciences in Bharatpur, was a great success with numerous local and international participants, with all five continents represented.

To follow are highlights on upcoming meetings and additional information about international brain tumor activities.

South/Central America

Under the leadership of Jose Valerio, MD, FAANS, director of neurosurgical oncology section of Latin America Neurosurgical Society (FLAN), the IV Brain Tumor and Spine Surgery Symposium will take place on March 19-22, 2015, in Miami. The meeting will focus on reviewing the most frequently utilized procedures, with both lectures and cadaver workshops.

Australia

The premiere fund-raising body for brain cancer research in Australia is the Cure Brain Cancer Foundation (CBCF), founded by Charlie Teo, MD, internationally renowned neurosurgeon and the only Australian neurosurgeon to be board-certified in both Australia and America. Over the last three years, the objective of this foundation was to encourage all the major neuro-oncology groups to collaborate in the spirit of accelerating the development of treatment options. The model has been most successful, and the annual report of the CBCF is a comprehensive summary of the entire national scene: www.curebraincancer.org.au.

Asia

The Japan Neurosurgery Registry (JNR) has been set forth by the Japan Neurosurgical Society utilizing the NCD (National Clinical Database) online system from Jan. 8, 2015. The purposes of this registry are the evaluation of Japanese neurosurgical services, the creation of a database for reassessment of health-care services provided by health insurance, and the establishment of a platform for clinical research. Fumio Yamaguchi, MD, PhD, reports that the input data will include patients’ demographics, surgeons, disease and surgical procedures, along with admission and discharge codes. This database will be effectively utilized for the improvement of patient care and brain tumor research in conjunction with Brain Tumor Registry of Japan.

Upcoming neurosurgical meetings in Japan with focus on brain tumors include:

- The 33rd Annual Meeting of the Japan Society of Brain Tumor Pathology, May 29-30, 2015, in Takamatsu, Japan.
- The 15th Annual Meeting of the Japan Society of Intraoperative Imaging, June 20, 2015, in Kawasaki, Japan.
- The 33rd Annual Meeting of the Japan Society for Neuro-Oncology, Dec. 6-8, 2015, in Kyoto, Japan.

Europe

The fourth biennial joint meeting of the EORTC/EANO/ESMO (European Organization for Research and Treatment of Cancer/European Association of Neuro-Oncology/European Society for Medical Oncology) entitled “Trends in Central Nervous System Malignances” will take place on March 27-28, 2015, in Istanbul, Turkey. The main focus of this meeting is to accelerate the translation of cutting-edge discovery at the clinical level, and further promote international scientific co-operation, debate and exchange. Adopting a highly multidisciplinary approach, the conference will aim to draw an attendance of neuro-oncologists, neuroradiologists, neurosurgeons, neurologists, neuropathologists, medical oncologists, and radiation oncologists sharing the common goal of advancing the management, treatment and care of patients with central nervous system tumors, including gliomas, brain and spine metastatic disease, meningioma, CNS lymphoma and primary spinal cord tumors.

The 14th International Symposium “Updates in Neuro-Oncology”
will be held on July 1-4, 2015, in Cortona, Italy, under the leadership of Francesco Di Meco, MD. The meeting is part of a series of collaborative symposia of the National Neurological Institute Carlo Besta, Milan, Italy; Vanderbilt University, Ohio State University, Johns Hopkins University, Tel Aviv Medical Center and Harvard Medical School. The outstanding international speakers’ panel and the topics covered by the meeting provided a comprehensive review of the most recent advances in the field of neurooncology, including extensive insights on the role of stem cells in the pathogenesis of gliomas, the implications for future therapies and the translation of laboratory findings into clinical practice. The meeting will also highlight the role of 3D virtual reality and surgical simulation in both fields of education and clinical practice.

In November 2014, the Besta NeuroSim Center at the National Neurological Institute was inaugurated. This is the first center for training and neurosurgical simulation in Europe with the state-of-the-art 3D virtual reality neurosurgical simulators NeuroTouch, ImmersiveTouch, Surgical Theater, and the 3D anatomical visualizer, Virtual Proteins. The team at the Besta NeuroSim Center would like to propose a revolutionary training method for the new generations of neurosurgeons, identify how to achieve performance excellence in surgery, and explore a framework for the maintenance of clinical privileges in surgery using simulation.

Additional meetings:
• 64th Italian Neurosurgical Society (SINch) Meeting, June 24-26, 2015, Naples, Italy. The meeting will cover several topics of the neuro-oncology field, including treatment of recurrent gliomas.
• 15TH Interim WFNS meeting, Sept. 8-12, 2015, Rome.

Stereotactic Radiosurgery Report: Spring 2015
Jason Sheehan, MD, PhD, FAANS

The second North American Gamma Knife Consortium Meeting and the Gamma Knife Perfexion upgrade course will be held in Cleveland from June 26-28, 2015. A follow-up to the inaugural 2011 meeting held in Pittsburgh, it is designed to increase scientific knowledge-base and levels of evidence related to the use of the stereotactic radiosurgery (SRS). An international faculty of clinicians will present and discuss their clinical advances and innovative therapies. The topics covered will include Gamma Knife radiosurgery, linear accelerator-based radiosurgery (LINAC), proton beam, and MR-guided focused ultrasound. For complete details and to register, visit www.ccfcme.org/NAGKC15.

Also, the International Stereotactic Radiosurgery Society will host its 12th meeting in Yokohama, Japan, from June 7-11, 2015. This meeting is a multidisciplinary one that focuses on intracranial radiosurgery and stereotactic body radiotherapy. For further details and registration information, visit www.isrscongress.org/.

In other SRS-related news, the Centers for Medicare and Medicaid Services introduced improved technical reimbursement for single-session stereotactic radiosurgery. The 2014-2015 hospital outpatient reimbursement for single-session Cobalt- or LINAC-based improved by approximately 42 percent. For multisession SRS, HOPPS (Hospital Outpatient Prospective Payment System) payment largely remained unchanged.

Society of Neuro-Oncology Update
Michael A. Vogelbaum, MD, PhD, FAANS

The Society for Neuro-Oncology (SNO) is pleased to announce that John Sampson, MD, PhD, FAANS, chief of the division of neurosurgery, and Dr. Robert H. Wilkins and Gloria Wilkins Professor of Neurosurgery at Duke University Medical Center has been named the 2015 Abhijit Guha Award recipient.

Jointly administered by SNO and the American Association of Neurological Surgeons/Congress of Neurological Surgeons Section on Tumors, this award recognizes an individual who emulates the qualities demonstrated by Ab Guha, MD, FAANS, during his career. Correspondingly, the award honors an accomplished investigator who has achieved significant results both in the laboratory and the clinic. Moreover, the award seeks to recognize an individual who has played an active role in the mentorship of the next generation of neuro-oncology professionals.

The Guha Award and Lecture will be given during the 2015 Section on Tumors Meeting. Of note, this meeting will be commemorating the 20th anniversary of SNO and will be held in San Antonio on Nov.19-22, 2015.
Once again, it has been a busy six months regarding the diagnosis and treatment of skull base tumors. The 25th annual scientific meeting of the North American Skull Base Society (NASBS) just finished in Tampa, Fla. The theme of the meeting was, “The whole is greater than the sum of its parts.” There was a pre-meeting practical course, Feb. 18-19, 2015, at the state-of-the-art Center for Advanced Medical Learning and Simulation. The course featured endoscopic transnasal approaches, with emphasis on identification of key vascular structures and management of vascular injuries, trans-temporal bone approaches to expose the petrous apex and a full day of microvascular anastomosis using a live rat femoral artery and vein model. The scientific meeting was held Feb. 20-22, 2015, and featured 12 breakfast seminars and 24 concurrent sessions, featuring experts in a wide variety of fields who discussed the varied difficult and sometimes controversial topics related to skull base tumors. The three plenary sessions featured lecturers by honored guests, Harry van Loveren, MD, FAANS; L. Dade Lunsford, MD, FAANS; and Edward R. Laws, MD, FAANS. In addition, there were 162 proffered papers covering a wide breadth of topics and 125 posters. As in previous years, awards were given to the top proffered papers by a resident and a medical student. Also, this year for the first time, best poster awards were also given. More than 500 participants registered for the meeting, and the scientific quality of all the presentations was excellent. Other highlights included a one-hour, 3D anatomy lecture by Al Rhoton, MD, FAANS, and astronaut Fred Haise, who served as the lunar module pilot during the ill-fated 1970 Apollo 13 mission, was the keynote speaker with quite a lesson about the importance of teamwork.

The upcoming 2015 American Association of Neurological Surgeons (AANS) Annual Scientific Meeting in Washington D.C., May 2-6, 2015, promises to be equally as exciting for members with a particular interest in skull base tumors. There are half-day practical courses on May 2-3, 2015, on the nuts and bolts of posterior fossa surgery, 3D anatomy and approaches to the anterior skull base, the practical and technical aspects of pituitary surgery, state-of-the-art cranial endoscopy, anatomy and approaches to the posterior skull base and craniofacial stabilization techniques. Additionally, there are breakfast seminars, featuring such topics as suprasellar and juxtasellar tumor, acoustic neuromas, surgical approaches to the lateral skull base, open vs. endoscopic approaches to the anterior skull base, pituitary tumors and discussion of complications in cranial surgery. Of course, the Tumor Section sessions will be from 2-5:30 p.m. on May 4-6, 2015. Without question, the highlight of this year’s 2015 AANS Annual Scientific Meeting is the 11th Biennial Satellite Symposium on Tumors, May 1-2, 2015, emphasizing technical developments and advances in neuro-oncology.

There continues to be active research investigating a wide variety of topics concerning skull base tumors. If you search the term, “skull base tumors” at “clinicaltrials.gov,” 80 unique items come up. Just to highlight a few of these that are actively recruiting include: NCT01767792, a phase 2 study of Bevacizumab in children and young adults with NF 2 and progressive vestibular schwannomas; NCT02055859, Cyberknife radiosurgery for patients with neurinomas (ACOUNEU); NCT00863122, concentration and activity of Lapatinib in vestibular schwannomas; NCT01200680, genetic clues to chordoma etiology: A protocol to identify sporadic chordoma patients for studies of cancer-susceptibility genes; NCT01182779, trial of proton versus carbon ion radiation therapy in patients with chordoma of the skull base (HIT-1); NCT02165969, olfactory function following endoscopic endonasal skull base surgery (UPSIT) and NCT02249572, Vestibular Schwannoma - Radiosurgery or Expectation: V-REX, which is the first attempt at actually prospectively randomizing vestibular schwannoma patients to either radiosurgery or observation to try to determine which strategy results in best hearing outcomes. According to Morten Lund-Johansen at Haukeland University in Bergen, Norway, recruitment is going well.

Tumor Section members are also encouraged to register their senior residents in the upcoming AANS-sponsored hands-on dissection course of skull base techniques at the Medical Education and Research Institute in Memphis, Tenn., March 19-22, 2015, led by former AANS and North American Skull Base Society president, Jon Robertson, MD, FAANS. This two-and-a-half day course teaches endoscopic and open microsurgical cadaveric dissections to the anterior, lateral and posterior skull base, assisted by an extremely experienced and dedicated faculty centered on the anatomical teachings of Dr. Rhoton. Each session begins with 3D anatomical lectures and then moves to the world-class dissection laboratory for hands-on dissection and learning. As in past years, it will no doubt be highly educational and a great opportunity for fellowship and networking.

I look forward to seeing everyone in Washington, D.C. for a great Tumor Satellite Symposium and AANS Annual Scientific Meeting.
E. Antonio Chiocca, MD, PhD, FAANS, chairman of the
department of neurosurgery at the Brigham and Women’s Hospital,
offered his insights on “Neurosurgery, science, academia, and
how to make it” to a full audience at the Young Neurosurgeons
Committee / Tumor Section reception at the Congress of

In the traditional academic model, the interested neurosurgeon
could devote sufficient time to investigating scientific problems in
the lab, abetted by a lower cost for research and perhaps decreased
stringency of competition. However, competing demands of the
neurosurgeon’s clinical responsibilities and a dedication to research
has been well recognized since the time of Harvey Cushing. As he
advised Percival Bailey, MD: “Bailey, if you succeed … you will
find yourself too busy to do any investigative work.”¹ In today’s
academic arena, the financial expectations of revenue from senior
leadership also conflict with pursuing a dedicated research career.
The time, energy and creativity to build the research portfolio
may be easier to invest early in one’s career, but implies an income
disequilibrium compared to one’s maximal clinical potential, or
in comparison to colleagues who devote full-time energies to
operating.

For those who are motivated to persist in academic neurosurgery
and foster a research component to their career, Dr. Chiocca
offered several provisions that are necessary to establish a successful
neurosurgeon-scientist career: people, space and money. Aside from
a scientific mentor, technicians, postdoctoral fellows and students
form the backbone of a surgeon-investigator’s research support
network. They, and the young academic neurosurgeon, can be best
supported by being located in a space near or within the scientific
mentor. Financial support should be expected for the young
neurosurgeon-investigator for three to five years, with collateral
expectation of accruing grants and publications.

Dr. Chiocca echoed the sentiments of senior leaders throughout
neurosurgery: that a primary goal for the chair is to foster
individual success. The individual a chair chooses depends on
department needs, the quality and track record of the applicant,
the ability of the individual to integrate with the vision and team
spirit of the department, clinical competency, referral letters, and
how much budgetary allowance exists. The return on investment,
stated simply, comes in the form of quality and quantity of papers,
the ability to secure independent funding, intellectual creativity to
pursue patents, and serving as a role model for the next generation
of trainees. Ultimately, the chairman’s support can be crucial for
the young neurosurgeon-investigator’s bid to carve a path toward
academic success.

Reference

Washington Committee Report
Andrew Sloan, MD, FAANS

The Washington Committee continues to be active on multiple
fronts of interest to all neurosurgeons. Areas of particular
relevance to the tumor section include the following:
• Coding and reimbursement: In November 2014, the
Centers for Medicare & Medicaid Services (CMS)
proposed a transition of all global surgery services to 0 day
global periods. This will result in 15-25-percent cuts to
61510 (supratentorial craniotomy for tumor) and 61512
(supratentorial craniotomy for meningioma).
• Guidelines:
  • Radiation for GBM (ASTRO)
  • Low-grade Glioma
  • Pituitary Adenoma
  • Spinal Metastasis
• FDA Regulations, including:
  • New Rules for IDE
  • New roles for HDE
  • CLIA exemptions
• Health Technology Assessment:
  • NovoTumor Treating Fields & Pharmacogenetics
    are currently topics under consideration for Health
    Technology Assessment by the Washington State
    Healthcare Authority (WCA). The Washington
    Committee urged that the WCA include neurosurgeons
    in the evaluations of these technologies when (and if)
    they occur.
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